United States Court of Appeals

for the Second Circuit

APPENDIX

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74-2542

United States Court of Appeals

For the Second Circuit

B

Docket No. 72-1064

CHRIS-CRAFT INDUSTRIES, INC.,
Plaintiff-Appellant,

against

PIPER AIRCRAFT CORPORATION, HOWARD PIPER, THOMAS F. PIPER, WILLIAM T. PIPER, JR., BANGOR PUNTA CORPORATION, NICOLAS M. SALGO, DAVID W. WALLACE, THE FIRST BOSTON CORPORATION, PAUL L. MILLER and N. BAYARD,
Defendants-Appellees.

Docket No. 72-1120

BANGOR PUNTA CORPORATION,
Plaintiff-Appellant,

against

CHRIS-CRAFT INDUSTRIES, INC.,
Defendant-Appellee.

Docket Nos. 72-1053 and 72-1140

SECURITIES AND EXCHANGE COMMISSION,
Plaintiff-Appellant,

against

BANGOR PUNTA CORPORATION,
Defendant-Appellee (Cross-Appellant).

UNITED STATES COURT OF APPEALS
JAN 3 1973
A. DANIEL FUSARO
SECRETARY

APPENDIX ON APPEAL FROM FINAL JUDGMENTS OF UNITED STATES DISTRICT COURT FOR SOUTHERN DISTRICT OF NEW YORK

VOLUME II — Pages 379A to 758A

Counsel of Record Are Listed on Inside of Front Cover

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Counsel of Record

PAUL, WEISS, RIFKIND, WHARTON & GARRISON
Attorneys for Chris-Craft Industries, Inc.
345 Park Avenue
New York, New York 10022
(212) 935-8000

WEBSTER SHEFFIELD FLEISCHMANN
HITCHCOCK & BROOKFIELD
Attorneys for Bangor Punta Corporation, David W. Wallace and Nicolas M. Salgo
One Rockefeller Plaza
New York, New York 10020
(212) 582-3370

SULLIVAN & CROMWELL
Attorneys for The First Boston Corporation, Paul L. Miller and N. Bayard
48 Wall Street
New York, New York 10005
(212) HA 2-8100

CHADBOURNE, PARKE, WHITESIDE & WOLFF
Attorneys for Piper Aircraft Corporation, Howard Piper, Thomas F. Piper and William T. Piper, Jr.
25 Broadway
New York, New York 10004
(212) 344-8900

G. BRADFORD COOK
General Counsel

DAVID FERBER
Solicitor

ROBERT E. KUSHNER
Assistant General Counsel

Securities and Exchange Commission
Washington, D.C. 20549

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83(A). [Proposed by First Boston] As of May 8, 1969, First Boston had not received a copy of SEC Release 8595, and was unfamiliar with its contents.

83B. [BP] As of May 8, 1969, neither Bangor Punta nor Piper had received a copy of SEC Release 8595, and both were unfamiliar with its contents.

Revised 1/21/71

84. [Proposed by Chris-Craft] Bangor Punta's legal staff and Piper's counsel obtained a copy of said SEC Release 8595 prior to May 14, 1969, and was familiar with its contents.

N/C

85. [Proposed by Chris-Craft] On April 20, 1969 Bayard attended two meetings at the Yale Club. Present at the first meeting were William T. Piper, Jr., Howard Piper, Thomas Piper, Pool, Jamoneau, Deming and Leather of the Chadbourne firm, Arthur Long of D. F. King & Co. and Bayard and Laeri of First Boston. The second meeting included representatives of Bangor Punta. Exhibit 35 is notes of the discussion Bayard took during the course of the day.

86. [Proposed by Chris-Craft] Between April 28 and April 30, 1969 drafts of agreements between the Piper family and Bangor Punta were prepared and discussed which provided, among other things, for (a) Bangor Punta to seek to purchase approximately 150,000 shares of Piper stock (as described in the Section 2 quoted below), (b) for Bangor Punta to make a cash tender offer at a price of $80 a share for sufficient shares to give it over 50% of the outstanding stock of Piper, (c) for the Piper family to exchange its Piper shares for a specified package of Bangor Punta securities and (d) for Bangor Punta to make a further exchange offer to all other Piper shareholders for a package of securities or cash on a basis equal to or more favorable than the Piper family package. The drafts contained provisions for the Piper family to share equally with Bangor Punta all costs and expenses incurred by Bangor Punta in connection with the aforesaid 150,000 Piper shares described above in the event that Bangor Punta did not succeed in acquiring over 50% of Piper stock and also contained provisions giving the Piper family the right to purchase at Bangor Punta's cost the Piper shares acquired by Bangor Punta in the event that Bangor Punta did not succeed in acquiring more than 50% of Piper's outstanding stock.

A draft dated April 30, 1969 of such agreement states:

SLL

> "Section 2. Private Purchase. (A) Approximately 150,000 shares of Piper Common Stock are understood to be owned in substantial blocks by one or more investors for resale. Bangor Punta will use its best efforts either to purchase such shares or to obtain from such investors an option to purchase such shares at a future date, provided, however, that (i) in no event will Bangor Punta be obligated to pay for such shares an average price (including the direct cost of acquiring and exercising any option) in excess of $80 per share and (ii) Bangor Punta will not purchase, or obtain options on, less than 150,000 shares without first obtaining the consent of the Agent."

A draft of said agreement dated April 28, 1969 contained the same language except did not contain the word "direct" in subparagraph (i). The copy of said draft in the files of First Boston contains the marginal notations in the handwriting of "100,000 shares" beside the typed number "150,000" and "80.50 to cover commission" beside "$80 per share."

The draft dated April 30, 1969 was amended further to read as follows:

> "Section 2. Private Purchase. (A) Approximately 150,000 shares of Piper Common Stock are understood to be owned in substantial blocks by one or more investors for resale. Bangor Punta will use its best efforts either to purchase such shares or to obtain from such investors an option or options to purchase such shares at a future date or to arrange with a third party for such purchase or the obtaining of such option, provided, however, that (i) in no event will Bangor Punta or such third party be obligated to pay for such shares an average price (including the direct cost of acquiring and exercising any option) in excess of $80 per share and (ii) Bangor Punta, or such third party will not purchase, or obtain options on, less than 150,000 shares without first obtaining the consent of the Agent."

88. [Proposed by Chris-Craft] On May 5, 1969 Nicolas M. Salgo, Chairman of Bangor Punta, met with Robert W. Morey, Jr., the President of Bay Securities Corporation at its offices in San Francisco, California. The following deposition testimony (pages 24-26) of Mr. Morey with respect to some of the matters discussed at this meeting is not contested:

"Q Did Mr. Salgo say anything about Bangor Punta's intention?

A Yes.

Q What did he say?

A He indicated in substance that Bangor Punta was interested in seeking control of Piper.

Q Did he say how Bangor Punta intended to seek control?

A Yes, in part.

Q What did he say in part?

A He indicated that he had discussions with the Piper management, and that they were favorably disposed to Bangor.

Q Did he say anything about Bangor's intentions to purchase any shares of Piper stock from the Piper management or Piper family?

A Yes.

ALL

Q What did he say?

A I don't recall exactly what he said, but in substance he indicated that the management of Piper and the stock that they represented might be interested in selling to Bangor."

* * *

"Q Did Mr. Salgo indicate when the purchase of the Piper family stock might take place?

A Yes.

Q What did he say?

A I don't know exactly. I don't recall exactly what he said, but to the best of my recollection, he indicated that they might be selling their stock to Bangor within a month."

4cc

89. [Proposed by Chris-Craft] Commencing on May 6, 1969 and continuing until May 23, 1969, Bay Securities Corporation purchased 20,900 shares of Piper common stock from Alexander Brown & Sons, which it thereafter sold to Bangor Punta as set forth in Finding No. 93.

89A. [Proposed by Piper] The meeting between Mr. Salgo and Mr. Morey referred to in Finding 88, and the purchases by Bay Securities Corporation referred to in Finding 89 occurred without the knowledge of Piper or the Piper defendants. Piper and the Piper defendants did not request that Mr. Salgo meet with Bay Securities or that Bay Securities purchase Piper stock.

91. [Proposed by Chris-Craft] On May 14, 1969, Bangor Punta purchased for cash 78,600 shares of Piper stock from Fund of Funds Proprietary Fund, Ltd. at the price of $80 a share, inclusive of a fee, in a privately negotiated transaction not on any national exchange.

91A. [BP] On May 13, 1969, Mr. Salgo had a meeting at his office with Mr. Robert Freedman, an old friend, who had previously called Mr. Salgo and requested the meeting. Mr. Freedman told Mr. Salgo that he had just returned from Nassau and business meetings with Mr. Bernard Cornfeld. Mr. Cornfeld was then head of Investors Overseas Services, Ltd., which managed a group of off-shore mutual funds including FOF Proprietary Funds, Inc. ("FOF"). FOF was prohibited from selling securities to United States citizens in the United States pursuant to a consent decree entered into with the SEC.

91B. [BP] Mr. Freedman told Mr. Salgo that he had been asked by Mr. Cornfeld to inquire whether Bangor Punta would be interested in discussing with representatives of FOF the purchase of 78,600 shares of Piper common stock then owned by FOF. Mr. Salgo told Mr. Freedman Banger Punta was interested in purchasing such shares, if acceptable terms could be agreed upon. Mr. Freedman then told Mr. Salgo that he should contact Mr. William Sayad, an official of FOF in Nassau and arrange to meet him. Mr. Freedman then told Mr. Salgo that he, Mr. Freedman, did not wish any compensation for advising Mr. Salgo of the availability of these Piper shares and was just doing two friends a personal favor. Mr. Freedman was not a registered broker-dealer with the SEC or the NASD.

91C. [BP] Mr. Salgo then instructed Mr. Flick to contact Mr. Sayad in Nassau and arrange to meet with him to discuss the purchase. Mr. Flick did so and left for Nassau on May 13th to negotiate with FOF. On May 14, 1969, Mr. Flick completed the purchase of 78,600 Piper shares from FOF in Nassau at a price of $79.25 per Piper share. Bangor Punta also paid a fee of $.75 per Piper share to an English bank at the request of Mr. Sayad.

92. [Proposed by Chris-Craft] On May 15, 1969, Bangor Punta purchased for cash 20,000 shares of Piper stock from American Securities Corporation in a privately negotiated transaction not on any national exchange at a price of $74.25 a share. Bangor Punta does not claim any exemption under Rule 10b-6 with respect to this transaction.

All

92A. [BP] On May 15, 1969, Mr. Wallace received a telephone call from a representative of American Securities Corp. who told Mr. Wallace that they had available for sale 20,000 shares of Piper common stock and asked Mr. Wallace if Bangor Punta would be interested in purchasing such shares. American Securities represented the owner of these Piper shares, Donner Corp., a company engaged in buying, selling and managing securities for investment purposes. American Securities Corp. was engaged in the general securities brokerage business and was a registered broker-dealer with the SEC and the NASD.

92B. [BP] Bangor Punta purchased the 20,000 Piper shares from American Securities Corp. at a price of $74.25 per share.

93. [Proposed by Chris-Craft] Bangor Punta purchased an aggregate of 21,600 shares of Piper stock from Bay Securities Corporation for cash not on any national exchange in privately negotiated transactions on the following dates at the following prices:

May 16, 1969
2,300 shares at 76 per share
700 shares at 75.95 per share

May 20, 1969
11,200 shares at 76.25 per share

May 23, 1969
2,200 shares at 76.375 per share
5,200 shares at 78.375 per share

Bangor Punta does not claim any exemption under Rule 10b-6 with respect to these transactions.

AZC

93A. [DP] On May 16, 20 and 23, 1969, in three separate transactions, Bangor Punta purchased for cash from Bay Securities Corporation,. the wholly owned subsidiary of ISI Corp., a manager of a group of mutual funds, 3,000 shares, 11,200 shares and 7,400 shares of Piper common stock at an average price of $76.75 per Piper share. Bay Securities Corporation, a wholly owned subsidiary of ISI Corp. executed purchases and sales of securities on behalf of the mutual funds managed by its parent. Bay Securities Corporation was registered as a broker-dealer with the SEC and the NASD.

93B. [BP] Each of the three transactions with Bay Securities Corporation occurred in the same manner. Mr. Wallace received a telephone call from Bay Securities who inquired if Bangor Punta was interested in buying Piper shares at a quoted price. Mr. Wallace accepted each of the three offers that was made to Bangor Punta.

93D. (Proposed by Chris-Craft) No shares of Piper stock other than the Piper family stock were offered for sale to Bangor Punta prior to May 8, 1969.

DLC

93E. [BP] (a) At the time the purchases described in Findings 91, 92 and 93, were made by Bangor Punta between May 14 and May 23, 1969, the terms of the Chris-Craft exchange offer as originally announced on May 7, 1969 (See Finding 64) and as amended on May 15, 1969 (See Finding 80) were publicly known.

93F. [BP] (b) Prior to the April 7, 1969 meeting referred to in Finding 82, Chris-Craft's securities counsel, Messrs. Cravath, Swaine and Moore, advised Chris-Craft of their opinion that Rule 10b-6 did not apply to cash purchases by Chris-Craft on a registered exchange of Piper shares after the announcement of Chris-Craft's exchange offer.

95. [Proposed by Chris-Craft] During 1969 John Hancock Mutual Insurance Company ("John Hancock"), had outstanding loans to Bangor Punta in excess of $50,000,000, including $20,000,000 loaned pursuant to a Note and Warrant Agreement dated July 31, 1968 between John Hancock and Bangor Punta and its subsidiary Bangor Punta Operations, Inc. The Note and Warrant Agreement contained the following provisions:

> "7. Use of Proceeds. The net cash proceeds of the sale of the Notes and Warrants will be paid to the Company [Bangor Punta] and loaned by the Company to Operations and are intended to be applied by Operations to the acquisition of the assets and business or shares of capital stock of the corporation identified in a letter, dated the date hereof, from the Company to you [John Hancock] and approved by you, and/or of another corporation or corporations approved in writing by you, in your absolute discretion ("Approved Acquisitions"); pending application to Approved Acquisitions, Operations may use such proceeds for general corporate purposes, subject to your right to require prepayment of the Notes pursuant to section 12.4 if such proceeds are not applied to Approved Acquisitions prior to November 1, 1970. . . ."

* * *

"12.4 Required Prepayment Upon Failure to Complete Approved Acquisitions. If prior to November 1, 1970, Operations shall not have (i) applied $20,000,000 in cash to an Approved Acquisition or Approved Acquisitions and (ii) acquired substantially all of the assets and business or not less than 90% of the outstanding Capital Stock and Voting Stock of, or consummated the merger into Operations of, each corporation which was the subject of an Approved Acquisition, you or any successor holder or holders of a majority in principal amount of the Notes at the time outstanding may, at your, its or their option, by notice given to the Companies prior to May 1, 1971, require the Companies to prepay a principal amount of the Notes at the time outstanding not in excess of the amount by which $20,000,000 exceeds the aggregate amount of cash applied to any Approved Acquisition or Approved Acquisitions which have been so completed (i.e., by the acquisition of substantially all of such assets and business or not less than 90% of such Stock or by consummation of such merger), and the Companies shall prepay, without premium, such principal amount of Notes on a date fixed by the Companies not less than 30 nor more than

180 days following the receipt by either of the Companies of such notice, provided that, concurrently with such prepayment, you or such holder or holders shall surrender or cause to be surrendered for cancellation Series B Warrants for the purchase of the number of shares of Common Stock (without giving effect to any adjustment therein) which bears the same relationship to 60,000 shares as the principal amount of Notes so prepaid bears to $20,000,000."

96. [Proposed by Chris-Craft] On May 16, 1969 John Hancock advised Bangor Punta that Piper qualified as an "Approved Acquisition" under the Note and Warrant Agreement dated July 31, 1968, and further stated that "* * * This consent is valid only until November 1, 1970."

96A. [Proposed by Piper] Neither Piper nor the Piper defendants were aware of the terms of the Note and Warrant Agreement dated July 31, 1968 between John Hancock and Bangor Punta and its subsidiary, Bangor Punta Operations, Inc.

97. [Proposed by Chris-Craft] On May 26, 1969, the SEC commenced an action against Bangor Punta and Piper in the United States District Court for the District of Columbia, alleging, in substance, that the May 8, 1969 press release violated Section 5(c) of the Securities Act of 1933 and Rule 135 thereunder. Simultaneously with the filing of this action, Bangor Punta and Piper in a written stipulation with the SEC consenting to the entry of a permanent injunction stipulated, among other things:

> "3. Defendants Bangor Punta Corporation and Piper Aircraft Corporation, without admitting the allegations in said complaint and alleging that any acts on its part were not done with the intent to violate any provision of law, hereby consent to the entry of a Final Judgment of Permanent Injunction conformable to the demands of the complaint herein.
>
> 4. This stipulation and consent is for the purpose of the pending action, and the pending action only, and does not constitute an admission by the Defendants for any other purpose and may not be used against the Defendants or others in any other proceeding."

The permanent injunction, among other things, ordered:

> "that said defendants cannot announce or implement any exchange offer unless and until such announcement of said exchange offer and the exchange offer comply with the registration provisions of the Federal securities laws."

98. [Proposed by Chris-Craft] On May 29, 1969 Bangor Punta filed with the SEC a registration statement including a preliminary prospectus for its Piper exchange offers. The preliminary prospectus included information supplied by Piper as stated on page 65 of such prospectus. First Boston was designated in this prospectus as Dealer-Manager. Bangor Punta mailed a copy of the preliminary prospectus to all Piper shareholders. ALL

99. [Proposed by Chris-Craft] Bangor Punta's preliminary prospectus dated May 29, 1969 proposed to offer to the shareholders of Piper other than the Piper family the following Bangor Punta securities for each share of Piper:

(a) 1 common share;

(b) Series C Warrants expiring March 31, 1981 to purchase 3.25 shares of Piper common stock at $55 a share; and

(c) $15 principal amount of a new 5-1/2% convertible subordinate debenture, due 1994, convertible at $55 per share.

100. [Proposed by Chris-Craft] Bangor Punta's preliminary prospectus dated May 29, 1969 stated at page 3:

> "If and to the extent the total of (i) the closing price of one share of the Common Stock on the New York Stock Exchange on the day preceding the date of this Prospectus, (ii) the reported bid price on such date of the Warrants in the over-the-counter market times 3.25 and (iii) $15 face amount of a Debenture is less than $83, the offer under the General Exchange Offer will be increased with additional Warrants and/or cash to compensate for the difference."

ALL

Now 12/15/70

411A

101. [Proposed by Bangor Punta] The language set forth in Finding 100 was discussed by Bangor Punta's legal staff with the staff of the SEC before such language was inserted in the preliminary prospectus. The staff of the SEC did not object to such statement being included in the preliminary prospectus, which prospectus the staff of the SEC knew would be distributed to the Piper shareholders.

101A. [Proposed by Piper] On June 4, 1969, Piper sent to all Piper shareholders the following letter over the signature of defendant W. T. Piper, Jr.:

413 A

Piper Aircraft Corporation

Lock Haven, Pennsylvania 17745

IMPORTANT

June 4, 1969

DEAR PIPER SHAREHOLDER:

On May 29, 1969 Bangor Punta Corporation filed a registration statement with the Securities and Exchange Commission for a proposed Exchange Offer of a package of its securities for all shares of Piper Aircraft Corporation that you may own. A copy of the Preliminary Prospectus relating to this proposed Exchange Offer was mailed to you last week. In your own interests we urge you to read and study this material carefully.

Bangor Punta's proposed offer for each of your Piper shares consists of one share of Bangor Punta common stock, a warrant to purchase 3.25 shares of Bangor Punta common stock at $55 per share and $15 principal amount of a new Bangor Punta 5½% convertible subordinated debenture.

If you have not received your copy of Bangor Punta's Preliminary Prospectus, please do not hesitate to call collect or write us or D. F. King & Co., Inc., 48 Wall Street, New York, N. Y. 10005 (212-269-5550).

Sincerely,

W. T. Piper, Jr.

W. T. PIPER, JR.
Chairman of the Board of Directors and President

Rev. 1/25/71

414 A

102. [Proposed by Chris-Craft] Between June 4, 1969 and June 17, 1969 John Hancock purchased 60,000 shares of Bangor Punta common stock. 57,700 shares were purchased on the NYSE of the 94,000 traded in that period and the balance of 2,300 shares were purchased on the Mid-West Stock Exchange.

Acc

102A. [Proposed by Piper] Neither Piper nor the Piper defendants were aware of the purchases of Bangor Punta common stock by John Hancock in June, 1969, nor did they request that such purchases be made.

104. [Proposed by Chris-Craft] Piper sent letters on its letterhead to its shareholders on June 20, 1969 and July 25, 1969, each of which was signed "W. T. Piper, Jr., Chairman of the Board of Directors and President":

(a) The June 20, 1969 letter stated:

[attached]

(b) The July 25, 1969 letter stated:

[attached]

417A

Piper Aircraft Corporation

Lock Haven, Pennsylvania 17745

June 20, 1969

Dear Piper Shareholder:

In its continuing attempt to take over your Company, Chris-Craft Industries, Inc. has again extended its offer of a package of its securities and cash in exchange for a limited amount of Piper common stock. The Executive Committee of your Company unanimously believes this offer is not in your best interests and you should therefore continue to reject it. We ask you to consider carefully the following:

1. Chris-Craft is offering you a share of $2 preferred stock convertible into 2.4 shares of Chris-Craft common, warrants to purchase 2 shares of Chris-Craft common upon payment of $25 per share and $10 in cash for each share of Piper common stock that you own. You should know that on May 19, the date Chris-Craft's offer became effective, Chris-Craft's common stock closed at $22. On June 19, only thirty-one days later, Chris-Craft common stock closed at $15⅝—down more than 25%.

2. We believe that Chris-Craft's offer is inherently disadvantageous to Piper shareholders in that it is both conditional and limited. The offer is conditional upon at least 80,000 shares of Piper being deposited and is limited to 300,000 shares (or, solely at Chris-Craft's option, up to 400,000 shares). This demonstrates Chris-Craft's unwillingness to make an unconditional offer to all Piper shareholders.

3. Any tender of your shares under Chris-Craft's offer would be irrevocable by you. If tendered, your shares could be out of your possession and control until July 20, without any payment to you other than a small interest consideration.

4. Chris-Craft's offer is a fully taxable transaction in the year the exchange occurs.

5. Chris-Craft asks as part of its offer that you give Chris-Craft an irrevocable proxy.

6. Chris-Craft admits that if its offer is successful it intends to combine its business with that of Piper through merger or otherwise, but it does not tell you what the price, terms and conditions of any such combination would be for the balance of Piper stock outstanding or when it would be consummated.

7. Chris-Craft states that if its offer is successful it may attempt to elect a majority of the Piper Board of Directors as soon as possible. We believe it clear that Chris-Craft would rather deal with its own representatives in merging or consolidating the two companies than on an arm's length bargaining basis.

8. You should know that Chris-Craft's exchange offer has now been extended three times since the original expiration date of June 5, 1969. Chris-Craft has refused to make any announcement concerning the number of shares, if any, deposited under its offer or to let you know whether its 80,000 share condition has been met.

No member of your Board of Directors (except possibly the two Chris-Craft employees elected by Chris-Craft at the last annual meeting) and no officer or other member of Piper's management will accept the Chris-Craft offer.

We are convinced that your best interests will be served by continuing to reject Chris-Craft's limited and conditional offer.

We will continue to keep you informed.

Sincerely,

W. T. Piper, Jr.

W. T. PIPER, JR.
Chairman of the Board of Directors and President

418A

Piper Aircraft Corporation

IMPORTANT

July 25, 1969

Dear Fellow Shareholder:

On July 19, 1969 you were sent a Prospectus and a Letter of Transmittal from Bangor Punta Corporation in connection with its exchange offer for any and all outstanding shares of common stock of Piper Aircraft Corporation. This offer became effective on July 18 and will expire at 5:00 p.m., New York time, on July 29, unless extended.

Under the terms of its offer Bangor Punta will exchange for each share of Piper common stock the following Bangor Punta securities:

1.2 Common Shares

Warrants to purchase 3.5 Common Shares

$31 principal amount of 8¼% Convertible Subordinated Debentures Due 1994

The members of your Board of Directors (with the exception of Messrs. Gordon and Rochlis, the directors elected by Chris-Craft) sincerely believe that a combination with Bangor Punta is in the best interests of all the shareholders. Your management and Executive Committee have been impressed with the management and operations of Bangor Punta. We strongly recommend that you accept the Bangor Punta offer.

If you desire to take advantage of this offer, you may do so by completing the Letter of Transmittal and forwarding it together with your stock certificates or by having your broker or any bank send a telegram to Irving Trust Company, One Wall Street, New York, New York 10015, giving your name and the number of shares tendered and guaranteeing delivery of stock certificates and a Letter of Transmittal within eight days of notice of acceptance from Bangor Punta. In any case, your communication must be received by Irving Trust Company before 5:00 p.m. on Tuesday, July 29.

On behalf of the Executive Committee and management I would like to express my sincere appreciation for the confidence and loyal support of our many shareholders during this difficult time.

We urge you again to accept the Bangor Punta offer. If you have any questions concerning this offer, please do not hesitate to call us, The First Boston Corporation (212-344-1515) or your banker, broker or investment advisor.

Sincerely,

W. T. Piper, Jr.

W. T. PIPER, JR.
Chairman of the Board of Directors
and President

104A. [Proposed by Piper] The letters dated June 20, 1969 and July 25, 1969 were submitted by Piper to the SEC before they were sent to Piper shareholders. At no time did the SEC object to the form or contents of either letter.

105. [Proposed by Chris-Craft] On May 7, 1969 Mr. Laeri of First Boston consulted the First Boston Corporate trading department and was told that, as then constituted, the package of Bangor Punta securities to be offered to the Piper family had a value of approximately $70 per Piper share and on said date Mr. Laeri told W. T. Piper, Jr. that such securities package had a value of approximately $70 per share. On May 8, 1969, when the package of Bangor Punta securities to be offered to the Piper family by Bangor Punta had been revised to consist of the securities described in Finding 66, Mr. Laeri told W. T. Piper, Jr. that the securities had a value of between $70 and $72 per Piper share. On May 7, 1969, the closing price of Bangor Punta's common stock on the NYSE was $32-3/4; and the bid and asked prices* of its Series C Warrants was $11-1/2-12. Bangor Punta's new convertible debenture was not issued or trading, but Mr. Laeri told Bangor Punta that, based on a comparable Eurodollar convertible debenture previously issued by Bangor Punta, the $15 face amount of new convertible debentures to be issued to the Piper family had a value of "somewhere close to $13."

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* As reported by the National Quotation Service.

106. [Proposed by Chris-Craft] On June 20, 1969, the closing price of Bangor Punta's common stock on the NYSE was 27-2/8 and the bid and asked prices* of its Series C Warrants were 7-3/4 - 8-3/4. On July 18, 1969, the closing price of Bangor Punta's common stock on the NYSE was 23-1/2; the bid and asked prices of its Series C Warrants were 7-1/2 - 8-1/2, and there were no bid and asked prices of its 8-3/4% debentures (which commenced when issued trading on July 23, 1969); and on July 25, 1969, the closing price of Bangor Punta's common stock on the NYSE was 20-7/8, the bid and asked prices of its Series C Warrants were 6-1/2 - 7-1/2, and the bid and asked prices of the 8-3/4% debentures were 81-85.

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* As reported by the National Quotation Services.

107. [Proposed by Chris-Craft] On September 5, 1969 First Boston delivered a written opinion to Bangor Punta and William T. Piper, Jr., stating: HLC

> "We understand that Bangor Punta Corporation ("Bangor") has issued under its Limited Exchange Offer a combination of Bangor securities to certain former shareholders of Piper Aircraft Corporation ("Piper") in exchange for their shares of common stock of Piper. Pursuant to an agreement dated as of May 8, 1969 between those former shareholders of Piper and Bangor, you have asked our opinion as to the value of the Bangor securities delivered to such former shareholders of Piper for each share of Piper common stock determined as of the opening date of Bangor's General Exchange Offer.
>
> * * *
>
> "We have reviewed the terms and provisions of the various securities as set forth in Bangor's Prospectus dated July 18, 1969. Furthermore, you have advised us that the opening date of Bangor's General Exchange Offer was July 18, 1969.
>
> "We are pleased to advise you that, in our opinion, the value as of the opening date of the General Exchange Offer of the above-described Bangor securities delivered for each share of Piper common stock was $53.50."

[Chris-Craft Exhibit 37]

108A. [Proposed by Piper] On July 16, 1969 Chris-Craft sent to all Piper shareholders the following letter over the signature of Gordon and Rochlis, both of whom were the Chris-Craft directors sitting on the Piper Board of Directors:

424 A

JAMES J. ROCHLIS
C. LEONARD GORDON
600 Madison Avenue, New York, N.Y. 10022

July 16, 1969

Dear Piper Shareholder:

Mr. W. T. Piper, Jr., in a letter dated June 20, 1969 written to you as Chairman of the Board and President of Piper Aircraft Corporation, urged you to reject the exchange offer which Chris-Craft Industries, Inc. has made for your stock. Mr. Piper and his family favor a proposed offer by Bangor Punta Corporation.

Mr. Piper's letter fails to disclose that he and his family have entered into a private agreement with Bangor Punta which provides them with a lucrative personal financial incentive for promoting the Bangor Punta offer over the Chris-Craft offer. Under the terms of the private agreement dated May 8, 1969, if Bangor Punta succeeds in acquiring more than 50 percent of the stock of Piper, Mr. Piper and his family will be entitled to an additional consideration for their own stock of more than $10,000,000 (computed on the basis of current market prices for Bangor Punta securities.) Mr. Piper is, therefore, being handsomely paid in this manner by Bangor Punta to promote its exchange offer to you, and oppose Chris-Craft's offer.

Mr. Piper and his family have the right to make their own private deals. But we believe it is an abuse of authority for him to use his position as chief executive officer of Piper to urge you to reject the Chris-Craft exchange offer without even mentioning his private self-interest.

Apart from this self-interest, Mr. Piper also failed to tell you of his lack of qualifications to comment on the Chris-Craft exchange offer. On June 16, 1969 he gave the following testimony under oath about the Chris-Craft exchange offer, which had been made almost one month earlier:

MR. PIPER "A. I know nothing about Chris-Craft warrants. <u>I know nothing about what they are offering, or their value.</u>

"Q. Are you saying that you did not inform yourself of the package they were offering?

MR. PIPER "A. I have seen the package and their offering.

"Q. You never made any inquiries as to what the value is:

MR. PIPER "A. I am not interested in exchanging my stock with Chris-Craft, so why should I stop and analyze their package. I have no idea what their package was." (emphasis supplied)

For the last six months the Piper management has been engaged in a frantic effort, at your expense, to prevent its shareholders from considering Chris-Craft's proposal on its merits. They have been willing to risk and have incurred sanctions against your Company by the Securities and Exchange Commission and the New York Stock Exchange to keep you from making an informed choice.

We ask you to evaluate the facts for yourself. For our part, we are directors of Piper, but we do not conceal the fact that we are also officers and directors of Chris-Craft which has invested approximately $35,000,000 cash in Piper stock. We are confident that you will not permit yourselves to be misled by self-serving statements issued in the name of Piper Aircraft Corporation.

Sincerely,

James J. Pocklington

C. Leonard Gordon

108B. [BP]

(a) Messrs. Rochilis' and Gordon's July 16, 1969 letter (See Finding 108A) did not state that the terms of the May 8 Agreement concerning additional consideration that might be payable to the members of the Piper family were set forth at several places in the Bangor Punta preliminary prospectus received by all Piper shareholders in early June 1969.

ALC

109. [Proposed by Chris-Craft] The May 8, 1969 press release of Bangor Punta and Piper, and the Piper letters of June 20, 1969 and July 25, 1969, did not describe or refer to the provision of the May 8, 1969 agreement quoted in Finding 66, reading as follows:

> "If Bangor Punta succeed[ed] in acquiring the Additional Shares and if in the written opinion of The First Boston Corporation the value of the Bangor Punta securities delivered . . . [to the Piper family] (the "Exchange Offer Value"), determined as of the opening date of such Further Exchange Offer, [was] less than $80, then Bangor Punta [would] promptly thereafter deliver to . . . [the Piper family] Bangor Punta securities and/or cash with a value in the written opinion of The First Boston Corporation equal to the difference between $80 and the Exchange Offer Value."

Said release and letters did not make any statements with respect to the additional consideration which the Piper family could receive if the conditions of said provision of the May 8 agreement were met.

[Proposed by Defendants]

109A. The Bangor Punta final prospectus stated with respect to the provision referred to in Finding 109 as follows:

(a) On the covering page of the final prospectus as follows:

"Pursuant to an Agreement dated as of May 8, 1969, Bangor Punta is simultaneously offering a share of its Common Stock, $15 principal amount of its Debentures and Warrants to purchase 2.2 shares of its Common Stock at $55 per share to 42 holders of Piper common stock holding an aggregate of 501,090 shares. Such Agreement provides that, in the event Bangor Punta obtains more than 50% of the outstanding common stock of Piper, the Piper shareholders party thereto shall receive additional Bangor Punta securities and/or cash (see 'Background of the Exchange Offers')."

(b) On page 3 of the final prospectus as follows:

"Exchange Offers. Bangor Punta offers, subject to its stockholders' approval, and upon the terms set forth herein, to exchange its securities for Piper Aircraft common stock as follows: (A) to those Piper shareholders who are not parties to the Agreement referred to under 'Background of the Exchange Offers' (i) 1.2 shares of Bangor Punta Common Stock (ii) Bangor Punta Warrants to purchase 3.5 shares of Bangor Punta Common Stock and (iii) $31 principal amount of 8 1/4% Convertible Subordinated Debentures Due 1994 for each share of Piper common stock and (B) to those Piper shareholders who are parties to such Agreement (i) one share of Bangor Punta Common Stock (ii) Bangor Punta Warrants to purchase 2.2 shares of Bangor Punta Common Stock and (iii) $15 principal amount of a 8 1/4%

"Convertible Subordinated Debenture Due 1994 for each share of Piper common stock. The exchange offer to the parties to the aforementioned Agreement is subject to increase upon the happening of certain conditions as described under 'Background of the Exchange Offers.'"

(c) On page 4 of the final prospectus as follows:

"BACKGROUND OF THE EXCHANGE OFFERS

"As of May 8, 1969 Bangor Punta entered into an agreement (the 'Agreement') with 42 holders of Piper common stock owning 501,090 shares. Under the Agreement as subsequently supplemented such holders agreed, subject to regulatory and Bangor Punta shareholder approval, to exchange their Piper common stock for (i) one share of Bangor Punta Common Stock, (ii) Bangor Punta Warrants to purchase 2.2 shares of its Common Stock at a price of $55 per share and (iii) $15 principal amount of a Bangor Punta 8 1/4% Convertible Subordinated Debenture Due 1994 (convertible into Bangor Punta Common Stock at a price of $55 per share) for each share of Piper common stock. Included among the parties to the Agreement are W. T. Piper Jr., Howard Piper and Thomas F. Piper, each of whom is a director of Piper. Such exchange offer is herein called the 'Limited Exchange Offer'. Under the Agreement Bangor Punta is to use its best efforts to acquire the remaining outstanding shares of Piper and to make this exchange offer for such shares ('General Exchange Offer').

"In the event that Bangor Punta succeeds in obtaining a sufficient number of shares so that its total ownership of Piper common stock is more than 50% of the shares outstanding and in the further event that at the date of the commencement of the General Exchange Offer the value of the Common Stock, Warrants and Debentures exchanged with the Piper shareholders who are parties to the Agreement is less than $80, such shareholders will receive Bangor Punta securities and/or cash equal to the difference between the value of such Common Stock, Warrants and Debentures on such commencement date and $80."

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(d) And, on page 18 of the final prospectus in Note 17(b) as follows:

> "(b) Assuming that 717,164 shares of Piper common stock are tendered pursuant to the Exchange Offers, Bangor Punta will own 837,364 shares, or 51% of Piper's outstanding common stock. For each share so tendered, Bangor Punta will issue (assuming for such purposes the Limited Exchange Offer is amended to provide for the same exchange as the General Exchange Offer), 1.2 shares of common stock, $31 of 8 1/4% convertible subordinated debentures due 1994, and 3.5 warrants. This would result in the issuance of 860,597 shares of common stock, $22,232,084 of 8 1/4% convertible subordinated debentures, and 2,510,074 warrants."

(e) On page 9 of the Chris-Craft final prospectus for its Exchange Offer dated July 24, 1969, there is the following statement:

> ". . .Pursuant to an agreement dated as of May 8, 1969, Bangor Punta is simultaneously offering one share of its common stock, $15 principal amount of its convertible subordinated debentures convertible at $55 per share and warrants to purchase 2.2 shares of its common stock at $55 per share to 42 holders of Piper Common Stock, including members of the Piper family, holding an aggregate of 501,090 shares. If Bangor Punta succeeds in obtaining more than 50% of the outstanding Piper Common Stock, and in the further event that at the date of commencement of Bangor Punta's exchange offer to the general public the value of the package of securities the 42 holders are to receive is less than $80, the 42 holders will receive in addition to the aforesaid securities Bangor Punta securities and/or cash equal to the difference between the value of the aforesaid securities and $80.

Substantially the same language as contained in subparagraphs "a", "b", "c" and "d" was included in the Bangor Punta preliminary prospectus.

110. [Proposed by Chris-Craft] Neither the existence nor the terms of the Bolles agreement dated May 14, 1969 were referred to in either of the Piper letters dated June 20, 1969 and July 25, 1969 or the Bangor Punta preliminary or final prospectuses, or otherwise made known to any persons other than the parties to the agreement, their counsel and First Boston. The existence of the Bolles agreement was first brought to the attention of Chris-Craft in about January 1970 when it obtained from First Boston, in the course of discovery proceedings in this litigation, First Boston's opinion rendered pursuant to such agreement. The existence of the Bolles agreement was first brought to Bangor Punta's attention at the same time and in the same manner that Chris-Craft learned of it.

110A. [Proposed by Piper.] The signatories of the May 14, 1969 memorandum of agreement constituting the Bolles group collectively owned only 46,358 out of the total of 501,090 shares owned by the Piper family. Those signatories were Mary Piper Bolles, the sister of the guarantors, W. T. Piper, Jr., Howard Piper and Thomas F. Piper, her husband, her two daughters and her minor son.

The Bangor Punta exchange offer was a taxable transaction. Mr. Bolles had pledged his wife's Piper stock to secure loans for his business and did not wish to jeopardize his business loans if he were required to sell a substantial amount of the securities received on the Bangor Punta exchange offer. Under the circumstances, Piper's counsel did not consider it necessary that any statements concerning the memorandum of agreement be made. The guarantors have not been required to make any payments under the memorandum of agreement.

111. [Proposed by Chris-Craft] The Piper letters dated June 20, 1969 and July 25, 1969 did not state that the members of Piper's management who were also members of the Piper family were parties to the May 8, 1969 agreement.

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[Proposed by Defendants]

111A. /The Bangor Punta preliminary prospectus stated with respect to the signatories of the May 8th agreement as follows:

(i) On the cover page of the preliminary prospectus:

"Pursuant to an Agreement dated as of May 8, 1969, Bangor Punta is simultaneously offering a share of its Common Stock, $15 principal amount of its Debentures and Warrants to purchase 2.2 shares of its Common Stock at $55 per share to 42 holders of Piper common stock holding an aggregate of 501,090 shares (see 'Background of the Exchange Offers')."

(ii) On page 3 of the preliminary prospectus:

"As of May 8, 1969 Bangor Punta entered into an agreement ('Agreement') with 42 holders of Piper common stock owning 501,090 shares whereby such holders agreed, subject to regulatory and Bangor Punta shareholder approval, to exchange their Piper common stock for (i) one share of Bangor Punta Common Stock, (ii) Bangor Punta Warrants to purchase 2.2 shares of its Common Stock at a price of $55 per share and (iii) $15 principal amount of a Bangor Punta 5-1/2% Convertible Subordinated Debenture Due 1994 (convertible into Bangor Punta Common Stock at a price of $55 per share) for each share of Piper common stock. Included among the parties to the Agreement are W. T. Piper Jr., Howard Piper and Thomas F. Piper, each of whom is a director of Piper. Such exchange offer is herein called the 'Limited Exchange Offer'."

(iii) On page 4 of the preliminary prospectus:

"LIMITED EXCHANGE OFFER:

Bangor Punta hereby offers to those holders of Piper common stock who are parties to the Agreement (see 'Background of the Exchange Offers') to exchange its Common Stock, 5-1/2% Convertible Subordinated Debentures Due 1994, and Warrants -- Series C expiring March 31, 1981 to purchase its Common Stock at $55 per share for all of the outstanding shares of Piper common stock tendered in accordance with this Limited Exchange Offer in the ratio of one share of Common Stock, $15 principal amount of a Debenture and Warrants to purchase 2.2 shares of Common Stock for each share of Piper common stock. The Debentures are convertible into Bangor Punta Common Stock at $55 per share."

(iv) On page 8 of the preliminary prospectus:

"The Soliciting Dealers, including the Dealer Manager, and the stockholders of Piper who are parties to the Agreement may be deemed to be underwriters within the meaning of the Securities Act of 1933."

and "The First Boston Corporation has rendered services as financial adviser to Piper and the stockholders of Piper who are parties to the Agreement referred to under 'Background of the Exchange Offers' for which it is to receive compensation in an amount not yet determined."

(v) On page 14 of the preliminary prospectus in Note 17 (a):

"17. (a) Assuming that only the 501,090 shares of Piper common stock owned by the parties to the Agreement are tendered pursuant to the Exchange Offers, Bangor Punta will own 613,890 shares, or 37.38%, of Piper's outstanding common stock. For each share so tendered, Bangor Punta will issue one share of common stock, $15 of 5-1/2% convertible subordinated debentures due 1994, and 2.2 warrants. This will result in the issuance of 501,090 shares of common stock, $7,516,350 of 5-1/2% convertible subordinated debentures, and 1,102,398 warrants."

(vi) On page 21 of the preliminary prospectus in Note (1):

"If Bangor Punta acquires only the 501,090 shares of Piper stock owned by the parties to the Agreement, Bangor Punta will own 613,890 shares, or 37.38%, of Piper's outstanding common stock."

(vii) On pages 23 and 24 of the preliminary prospectus in Note (a):

"(a) Assuming that only the 501,090 shares of Piper stock owned by the parties to the Agreement are tendered pursuant to the Exchange Offers, Bangor Punta will own 613,890 shares, or 37.38%, of Piper's outstanding common stock, which will be carried as an investment. The pro forma balance sheet gives effect to the following adjustments:

"Purchase by Bangor Punta of 112,800 shares of Piper common stock with a corresponding reduction in cash and marketable securities of $8,860,000.

"Issuance of 501,090 shares of Bangor Punta common stock with an

assumed value of $33 per share, for a total of $16,535,970.

"Issuance of $7,516,350 of 5-1/2% convertible subordinated debentures due 1994.

"Issuance of 1,102,398 warrants to purchase Bangor Punta common stock with an assumed value of $10.75 for a total of $11,359,778."

(viii) On page 9 of Chris-Craft's final prospectus dated July 24, 1969, Chris-Craft made the following statement:

"Pursuant to an agreement dated as of May 8, 1969, Bangor Punta is simultaneously offering one share of its common stock, $15 principal amount of its convertible subordinated debentures convertible at $55 per share and warrants to purchase 2.2 shares of its common stock at $55 per share to 42 holders of Piper Common Stock, including members of the Piper family, holding an aggregate of 501,090 shares."

Substantially the same language as contained in subparagraphs (i) up to (vii) was included in the Bangor Punta final prospectus dated July 18, 1969.

114. [Proposed by Chris-Craft] The Piper letters dated June 20 and July 25, 1969 did not state that Bangor Punta's proposed exchange offer as described in the preliminary prospectus, like the Chris-Craft exchange offer discussed in Piper's June 20, 1969 letter: (i) required that Piper shares be irrevocably tendered, (ii) would be fully taxable in the year the exchange occurred, (iii) asked that tendering Piper shareholders give Bangor Punta an irrevocable proxy, (iv) did not set forth terms of any future merger or consolidation.

114A. [Proposed by Defendants] The information referred to in (i), (ii) and (iii) of Finding 114 concerning Bangor Punta's proposed exchange offer was set forth at pages 5, 7 and 8-9 of Bangor Punta's preliminary prospectus and the same information was also included in Bangor Punta's final prospectus.

116A. [Proposed by Piper] On July 25, 1969, Chris-Craft sent to all Piper shareholders the following letter commenting upon the Bangor Punta and Chris-Craft exchange offers which were at that time both outstanding:

441 A

Chris-Craft
INDUSTRIES, INC.

600 MADISON AVENUE / NEW YORK, N.Y. 10022 / (212) 421-0200

EXECUTIVE OFFICE

July 25, 1969

Dear Piper Shareholders,

Bangor Punta is offering you in exchange for your Piper common stock a package of its securities consisting of (a) 1.2 shares of its Common Stock; (b) warrants to purchase 3.5 shares of its Common Stock at $55 per share; and (c) $31 face amount of its debentures, convertible into its Common Stock at $55 per share.

Chris-Craft has filed a new prospectus which increases its offer to you to (a) $10 cash; (b) one share of $2 Convertible Preferred Stock, convertible into 3.4 shares of Chris-Craft common stock; and (c) six warrants to purchase Chris-Craft Common Stock at $25 per share. The offer is now for any and all Piper shares up to 300,000 (with the right to take an additional 100,000 at the option of Chris-Craft). Payment will be made as soon as possible after ten days from the effective date of the improved Chris-Craft offer.

Chris-Craft plans to mail to you soon a new prospectus covering its increased offer. We urge you not to accept the Bangor Punta offer until you have had an opportunity to compare it with the new improved Chris-Craft offer.

In addition, you should carefully consider the following facts:

1. Bangor Punta offers you no cash in its package. If you exchange your Piper stock in the Bangor Punta offer, you will need cash to pay taxes if you have a profit. Chris-Craft offers you $10 cash.

2. The Bangor Punta warrants are exercisable for its Common Stock at $55 a share. Its Common Stock traded today at only $22.50 a share. The Bangor Punta common stock would have to increase by $32 a share before the market price even reaches the exercise price of the warrants. You should note that the warrants which Chris-Craft is offering to you have an exercise price 11 points and 85% above the present market for Chris-Craft Common Stock. The Bangor Punta warrants are 32 points and 140% above the market for Bangor Punta Common Stock. We leave it to you as to which is more valuable.

3. The Bangor Punta Convertible Debenture we believe suffers from the same fault as the warrants. They are convertible into Bangor Punta Common Stock at $55 a share which is 140% above the current market price. Moreover, in the final Prospectus of Bangor Punta they disclose on the cover page a fact previously buried deep inside. We quote: "The Debentures ... are subordinate to Senior Indebtedness (as defined) which amounted to $135,944,560 as of June 25, 1969." This is more than the total stockholders equity of Bangor Punta which, as shown in its Prospectus, was only $120,081,000 as of March 31, 1969. Do not be misled by the $31 face value of the debentures. If they sell at a discount they could be worth much less.

4. Mr. Piper's letter to you of June 20, 1969 states that Chris-Craft's stock fell in price since it made its offer for Piper stock. It omitted to tell you that the Bangor Punta Common Stock has fallen much more -- more than 36% in value in the past month.

5. Bangor Punta's offer is contingent on a favorable vote of its shareholders. Once you have tendered, you will not be able to withdraw and your stock could be held indefinitely by Bangor Punta. Chris-Craft's offer has no such condition. Chris-Craft intends to issue the cash and securities for Piper Aircraft stock as soon as possible ten days after the commencement of the new offer becomes effective.

6. The new Chris-Craft offer is for any and all shares up to 300,000 with the right to take an additional 100,000 shares for a total of 400,000. With approximately 556,000 shares owned by Chris-Craft and 620,000 shares owned by or under contract to Bangor Punta only 460,000 shares are free to be tendered, so Chris-Craft's offer is, in fact, for the bulk of the available Piper stock.

We believe the Bangor Punta offer is not worth anything like what Mr. Piper and Bangor Punta would like you to believe it is worth. We are confident that independent analysts will recommend the new Chris-Craft offer over the Bangor Punta offer and suggest you consult your broker or financial advisor.

Chris-Craft is now mailing to you a prospectus covering its new offer. We urge you not to act hastily. Do not accept the Bangor Punta offer until you have had a chance to study the new, improved Chris-Craft offer.

Very truly yours,

CHRIS-CRAFT INDUSTRIES, INC.

By C. Edward Good Jr.
C. Leonard Corgon
Vice President

116B. [BP]

(a) Chris-Craft's July 25, 1969 letter (see Finding 116A) did not state the following: [which Chris-Craft asserts are not facts] submitted by Piper

(i) That all of the Bangor Punta securities offered on its exchange offer were readily marketable, and could be sold to raise cash for taxes.

(ii) That Bangor Punta warrants traded on the over the counter market and on July 24, 1969, such warrants were quoted at 6 3/4 - 7 1/2.

(iii) That the Bangor Punta Convertible Debentures were traded on the over the counter market and on July 24, 1969 such debentures were quoted at $83-$88.

(iv) That each security contained in the Bangor Punta package was quoted either on the NYSE in the case of the common shares and on the over-the-counter market for the warrants

and debentures and that the current market value of the entire Bangor Punta securities package was thus ascertainable.

(v) That from July 23, 1969, when market quotations for all of the components of the Bangor Punta package were first available, to July 25, 1969 the package of securities offered by Bangor Punta on its exchange offer had a market value exceeding the market value of the Chris-Craft package of securities offered either in the initial Chris-Craft exchange offer or its exchange offer which became effective on July 24, 1969.

116β. [Proposed by Piper] On July 17, 1969, Chris-Craft's Board of Directors adopted resolutions approving an exchange offer for Piper shares and giving Mr. Siegel the same discretion as to whether or not to proceed with the exchange offer, as quoted in Finding 78A . Mr. Siegel determined to proceed with the exchange offer.

1165. [Proposed by Piper] At all times until July 24, 1969, Chris-Craft had the right not to proceed with its exchange offers. It elected to proceed.

NLC

117. [Proposed by Chris-Craft] Bangor Punta's exchange offer became effective on July 18, 1969 and was announced to the public over the Dow-Jones tape at approximately 12:00 noon the same day. The exchange offer remained open to 5:00 P.M., July 29, 1969. The exchange offer to the public provided for the exchange of (a) 1.2 common shares of Bangor Punta common stock, (b) Bangor Punta's Warrants - Series C - to purchase 3.5 shares of Bangor Punta common stock at $55 a share, and (c) $31 principal amount of 8-1/4% convertible debentures, dated 1994, convertible at $55 a share, of Bangor Punta for each share of Piper common stock tendered.

117A. [BP]

After the close of the NYSE on July 17, 1969, Mr. Laun and Mr. Wallace discussed the composition of the Bangor Punta securities package to be offered to the Piper shareholders other than the Piper family in Bangor Punta's exchange offer which was to become effective the following day. On July 18, 1969, Bangor Punta received the annexed letter from First Boston.

449 A

THE FIRST BOSTON CORPORATION

CABLE ADDRESS
FIRSTCORP, NEW YORK

July 18, 1969

20 EXCHANGE PLACE
NEW YORK, N.Y. 10005

Mr. David W. Wallace
President
Bangor Punta Corporation
405 Park Avenue
New York, New York 10022

Dear Sir:

We understand that Bangor Punta Corporation ("Bangor") plans to offer a combination of securities to certain shareholders of Piper Aircraft Corporation ("Piper") in exchange for their shares of common stock of Piper. In this connection, you have asked us to advise you as to the value of such combination of Bangor securities.

You have informed us that under this exchange offer each share of Piper can be exchanged for the following Bangor securities:

(1) 1.2 Common Shares, par value $1 per share, plus

(2) A Warrant - Series C expiring March 31, 1981 to purchase 3.5 Common Shares at $55 per share, and

(3) $31.00 principal amount of 8 1/4% Convertible Subordinated Debentures Due 1994 convertible into Bangor Common Stock at $55 per share, nonredeemable prior to July 1, 1973 and thereafter initially at 108.25% of the principal amount, and entitled to a sinking fund commencing on March 31, 1980 sufficient to retire 91% of the principal amount then outstanding.

In addition, we have reviewed your Preliminary Prospectus dated July 16, 1969, as filed with the Securities and Exchange Commission, and understand that the other provisions of these securities will be substantially as set forth therein.

We are pleased to advise you that, in our opinion, the value of the above-described combination of Bangor securities is not less than $80 per common share of Piper. This valuation is based on market and other conditions existing prior to the opening of business on July 18, 1969.

Very truly yours,

THE FIRST BOSTON CORPORATION

By _____
John H. Imeri, Jr.
Vice President

117(B). [Proposed by First Boston] The opinion expressed in its July 18th letter to Bangor Punta was the collective judgment of an evaluation committee of First Boston which had met on July 15 and again on July 17. In reaching its judgment, the committee made use of a book containing data and analyses which had been prepared under Mr. Laeri's direction over a period of six weeks. Defendants' Exhibit ÃE-3 is the book prepared under Mr. Laeri's direction.

118. [Proposed by Chris-Craft] After its exchange offer became effective, Bangor Punta mailed to all of Piper's shareholders a final prospectus dated July 18, 1969. The final prospectus included information supplied by Piper as stated on page 54 of such prospectus. First Boston acted as "Dealer Manager" on the exchange offer and was so designated in such prospectus.

AKC

119. [Proposed by Chris-Craft] Bangor Punta's registration statement, including its preliminary prospectus, was subscribed to by its directors, including David W. Wallace, Nicolas Salgo and Curtis Hutchins. Amendment No. 2 to such registration statement was subscribed to by John Flick, Esq., attorney-in-fact for all directors.

Revised 12/16/70

453 A

120. [Proposed by Chris-Craft] Bangor Punta's final prospectus dated July 18, 1969 contained the following statements:

> "The Registration Statement of which this Prospectus is a part was filed on May 29, 1969. Prior to such date Bangor Punta and certain members of the Piper family issued a press release concerning the proposed Exchange Offers and neither such press release nor news reports concerning it should be relied on in making investment decisions." (at page 3)
>
> * * *
>
> "No guarantee of, or representation as to, the value of the securities offered by Bangor Punta pursuant to the Exchange Offers is or can be made." (at pages 3 and 5)

120A. [Proposed by Bangor Punta] The statements quoted in Finding 120 were inserted by Bangor Punta in its final prospectus as a result of comments contained in a letter of comments from the SEC to Bangor Punta dated June 17, 1969 concerning Bangor Punta's registration statement. The specific language contained in such statements was discussed prior to its inclusion in the final prospectus with the staff of the SEC who reviewed the Bangor Punta registration statement. The staff did not object to such language or to the insertion of such statements in the final prospectus.

120B. [Proposed by Piper] Between July 18 and July 29, 1969, while Bangor Punta's exchange offer for Piper shares was outstanding, Chris-Craft had the right to tender all of its Piper shares to Bangor Punta, since Bangor Punta's exchange offer was made to all Piper shareholders. Chris-Craft elected not to tender any of its shares to Bangor Punta and decided instead to proceed with its own exchange offer.

121. [Proposed by Chris-Craft] On July 22, 1969 Chris-Craft filed a registration statement entitled "Registration No. 2" and prospectus offering to the shareholders of Piper to exchange (a) .1 share of Chris-Craft's $2.00 convertible preferred stock, (b) warrants to purchase 6 shares of Chris-Craft common stock, and (c) $10 in cash for each share of Piper common stock tendered to it "up to 300,000 (and at its option up to 400,000) shares of Piper." This offer contained 4 more warrants than were contained in the Chris-Craft exchange offer described in Finding 80. The prospectus dated July 24, 1969 for the Chris-Craft exchange offer which was mailed by Chris-Craft to all Piper shareholders stated:

> "The Chris-Craft exchange offer for Piper Common Stock commenced May 19, 1969. Pursuant to that exchange offer, 39,826 shares of Piper Common Stock were tendered or committed to be tendered. None of those shares were accepted because the offer was for a minimum of 80,000 shares. The offer made hereby eliminates the 80,000 share minimum. On June 5, 1969, June 12, 1969, June 17, 1969, June 27, 1969, July 11, 1969 and July 21, 1969, Chris-Craft extended the exchange offer. That exchange offer is no longer in effect. The holders of the 39,826 shares of Piper Common Stock tendered under the earlier offer will be contacted personally by Chris-Craft and informed that such tendered shares may be withdrawn or retendered."

Registration Statement No. 2 became effective on July 24, 1969.

122(A). [Proposed by First Boston] At the time Bangor Punta's registration statement became effective, First Boston did not know (if true),

4. That Bangor Punta had been advised by its accountants that sale of the stock to Amoskeag for $5 million would result in a loss of about $14 million over the railroad's carrying value on the financial statements of Bangor Punta and a loss of about $25 million over Bangor Punta's equity in the underlying net assets of the railroad.

5. That formal approval by the Bangor Punta Board of the sale was being withheld in an attempt to avoid disclosure.

122(B). [Proposed by First Boston] As Dealer-Manager of the Bangor Punta exchange offer, First Boston through its attorneys read the minutes of the meetings of the Bangor Punta Board of Directors, including those of April 1, 1969 and May 21, 1969, and the portions thereof quoted in Findings 155 and 161.

No other minutes of Bangor directors' meetings or executive committee meetings subsequent to May 21, 1969 and prior to the effective date of the registration statement record anything concerning the railroad.

122(D). [Proposed by First Boston] First Boston was not shown, and was not aware of the existence of (1) Curtis Hutchins' letter dated May 27, 1969 to Frederic Dumaine, (2) Dumaine's memorandum of telephone conversation of June 16, 1969, or (3) the Lushing memorandum of May 20, 1969.

B

123A. [Proposed by Piper] Neither Piper, the Piper defendants, nor their attorneys were aware at any time of the consideration being given by Bangor Punta to the disposition of the Bangor and Aroostook Railroad. They first learned of the disposition from reports appearing in the press after October 3, 1969.

125. [BP] (a) The consolidated statement of earnings for the six-month period ended March 31, 1969, included in Bangor Punta's preliminary and final prospectuses reflected under the heading "Extraordinary Items": ...Net Gain (loss) on sales of properties and securities..." a gain of $1,351,141.

(b) The Bangor Punta statement of consolidated income for the year ended September 30, 1969 contained the following entry: "Extraordinary Items -- gains ($7,580,600 in 1969) and provision for losses ($22,132,600 in 1969) on disposition of assets ... - $14,552,031)."

(c) The following schedule shows the breakdown of the items making up the foregoing extraordinary items. Column 1 shows all of the extraordinary items which were refelcted in the six-month statement ended March 31, 1969, and Column 2 shows the extraordinary items reflected in the statement for Bangor Punta's fiscal year ending September 30, 1969:

Extraordinary Items

	1969	
	March 31	September 30
Gain on sale of marketable securities	$3,577,719	$ 7,580,603
Loss on sale of: Bangor & Aroostook R/R		13,813,289
BSP Corp.		227,705
Writeoffs:		
Excess costs		4,981,065
Investment in Amco Liquidating		105,768
Advances to Springfield Corp.	180,000	532,826
Partial Investment in Armatech		395,893
R & D Bushmaster - S&W		187,348
Receivables from Armatech - Patec		83,823
Patents - Amatec		231,436
Note Receivable from Penn Marine	175,000	175,000
Writedowns:		
Inventory - Crown Fabrics		875,000
Machinery & Equipment - Melena		75,000
Land & Building - Luhrs		20,414
Fire Loss - Luhrs	164,000	143,586
Provisions:		
Losses & Liquidations	255,318	
Litigation	205,000	
O'Day Canada	200,000	
Enesco - Operating expenses	143,855	284,481
	$1,323,173	$22,132,654
Federal income tax applicable on above	$ 903,405	--
Extraordinary items	$1,351,141	$14,552,031

126A(b) [BP]

(a) The following is a portion of the minutes of the regular meeting of the Executive Committee of Bangor Punta held on November 4, 1969:

Write off of Certain Intangible Assets.

The plan for the development of a new corporate structure was discussed. This plan provides for, among other things, the disposition of certain operating divisions, including the Railroad, Process Engineering and Equipment Group, Fashion Fabrics Group and the Kinney Company Division of the Emblematic Jewelry Group, and the concentration of management effort in the remaining, more profitable, divisions. Preliminary negotiations and assessments have indicated that not more than the amount of the net tangible assets will be realized by the corporation from the disposition of the Process Engineering and Equipment and Fashion Fabrics Groups and from the Kinney Company Division of the Emblematic Jewelry Group and that the intangible assets of such divisions have no realizable value. Thereupon, after discussion upon motion duly made, and seconded, it was:

RESOLVED, that the intangible assets of the Corporation's Process Engineering and Equipment Group, its Fashion Fabrics Group and the Kinney Company Division of its Emblematic Jewelry Group be written off as of September 30, 1969, as it is estimated that such intangible assets have no continuing value; and

RESOLVED, that the Chairman, Co-Chairman or President be and hereby is, authorized to liquidate any of the aforenamed operations as he or they may deem appropriate under the circumstances.

(b) At meetings of the Board of Directors held on April 1, 1969, May 21, 1969, August 7, 1969 and September 9, 1969 the desirability of disposing of the portions of Bangor Punta's business referred to in "a" above was discussed. (See Findings 155, 161, 169 and 179K.)

(d) The November 4, 1969 minutes of the Bangor Punta Executive Committee reflect that the Executive Committee decided that upon a liquidation of these businesses Bangor Punta would probably be able to receive at least the book value of the tangible assets, but the intangible assets, or so-called "good-will" or "value of a business as a going concern" might no longer have a continuing value and should be written off.

127. [Proposed by Chris-Craft] The Bangor Punta preliminary and final prospectuses contained the following Notes to the capitalization tables and financial statements of Bangor Punta at pages 18 and F-15 of the final prospectus:

> "Pursuant to a Note and Warrant Agreement dated July 31, 1968, the 7-1/4% joint and several notes due March 1, 1983 were issued together with 55,000 Series A warrants and 60,000 Series B warrants to purchase a total of 115,000 shares of Bangor Punta common stock at $55 a share, subject to adjustment. Any portion of the loan not used for "approved acquisitions", as defined, by November 1, 1970, must at the option of the holders of such notes and by notice given to Bangor Punta prior to May 1, 1971 be repaid. In the event of repayment, the lender must surrender the proportionate number of 60,000 Series B warrants originally received. Piper Aircraft Corporation is an "Approved Acquisition."
>
> "Pursuant to a Note and Warrant Agreement dated July 31, 1968, the 7-1/4% joint and several notes due March 1, 1983 were issued together with 55,000 Series A warrants and 60,000 Series B warrants to purchase 115,000 shares of Bangor Punta common stock at $55 a share, subject to adjustment. Any portion of the loan not used for "approved acquisitions", as defined, by November 1, 1970, must, at the option of the holders of such notes and by notice given to Bangor Punta prior to May 1, 1971 be repaid. In the event of repayment, the lender must surrender the proportionate number of 60,000 Series B warrants originally received. Annual installments on the notes are due in amounts equal to 2% of the aggregate principal amount from 1973 to 1977 and 6% from 1978 to 1982."

128. Proposed by Chris-Craft. The portion of Section 12.4 of the Note and Warrant Agreement which was not stated in Bangor Punta's prospectus,provided in substance that the portion of the John Hancock loan applied to an "Approved Acquisition" could be called by John Hancock, if, Bangor Punta did not succeed by November 1, 1970 in either merging with or acquiring 90% of the stock of the corporation which was the subject of the Approved Acquisition.

Findings 95, 127

128A [BP]

(a) The Note and Warrant Agreement between Bangor Punta and John Hancock portions of which are referred to in Finding 95 was filed with the SEC as an exhibit to the Bangor Punta registration statement for the exchange offers and was part of the SEC file available for examination by the public.

(b) The references in the Bangor Punta preliminary and final prospectuses to such Note and Warrant Agreement are contained at pp. 16-18, F-15-F-16 of Bangor Punta's final prospectus.

(c) In agreements dated September 30, 1970, and October 29, 1970, Bangor Punta revised both of its revolving credit arrangements with its banks and its Note and Warrant Agreement with John Hancock. Included in such revisions was the deletion of those portions of the Note and Warrant Agreement referred to in Findings 95 and 127.

130. [Proposed by Chris-Craft] Bangor Punta's final prospectus did not state that John Hancock purchased 60,000 shares of Bangor Punta common stock between June 4, 1969 and June 17, 1969, as described in Finding 102.

RRC

$4c

[Proposed by Chris-Craft]

132. [~~Contested~~] Bangor Punta's final prospectus dated July 18, 1969 stated at p. 9:

"The First Boston Corporation, as Dealer Manager, has entered into an agreement with Bangor Punta, a copy of which is filed as an exhibit to the Registration Statement, whereby the Dealer Manager has agreed to use its best efforts to make arrangements for selected securities dealers ("Soliciting Dealers"), including itself, to solicit exchanges pursuant to the General Exchange Offer. As compensation for such services, Bangor Punta will pay to the Dealer Manager a fee of 30¢ for each share of Piper common stock tendered in accordance with the General Exchange Offer, but such fee shall in no event be less than $40,000. No fees will be paid with respect to shares tendered after the Expiration Date. In addition, D. F. King & Co., Inc. has been retained to assist in the solicitation of tenders.

"The Dealer Manager, upon receipt of funds from Bangor Punta, will pay to each Soliciting Dealer a fee of $1.50 for each share of Piper common stock tendered in accordance with the General Exchange Offer, if, with the approval of the tendering stockholder, the name of such Soliciting Dealer has been inserted in a duly executed Letter of Transmittal or if Bangor Punta and the Dealer Manager have agreed that such Soliciting Dealer is entitled to such fee in recognition of the Dealer's services in effectuating the exchange provided that the fee payable with respect to the shares of any single exchanging shareholder shall be not less than $20. No fees will be paid to Soliciting Dealers if the General Exchange Offer is not consummated. No fees will be paid with respect to the Limited Exchange Offer.

"The Soliciting Dealer, including the Dealer Manager, and the stockholders of Piper who are parties to the Agreement may be deemed to be underwriters within the meaning of the Securities

Act of 1933. The Dealer Manager Agreement and the Agreement provide that Bangor Punta will indemnify the Soliciting Dealers, including the Dealer Manager, and the stockholders of Piper who are parties to the Agreement, respectively, against certain civil liabilities, including liability under the Securities Act of 1933.

"The First Boston Corporation has rendered services as financial adviser to Piper and the stockholders of Piper who are parties to the Agreement referred to under 'Background of the Exchange Offers' for which it is to receive compensation in an amount not yet determined. If Bangor Punta obtains a majority of the outstanding shares of, or merges with, Piper, Bangor Punta has agreed it will pay the compensation payable to The First Boston Corporation for such services."

The prospectus made no other reference to First Boston's relationship to Piper or the Piper family.

ALC

134. [Proposed by Chris-Craft] Piper's letter to shareholders dated January 28, 1969 (attached to Finding 24) stated that in view of Chris-Craft's announced intention to take control of Piper, Piper had retained D. F. King & Co., Inc. to assist it in the solicitation of proxies for the annual meeting at an anticipated cost of $10,000 including all fees and expenses.

DC

Revised 12/16/70

135 [Proposed by Chris-Craft] Between January and August 1969, Piper engaged the services of D. F. King & Co., Inc. to advise management with respect to the Chris-Craft tender offer and exchange offer. In addition, as stated in the above Piper letter dated January 28, 1969, Piper separately retained the said D. F. King & Co., Inc. for assistance in the solicitation of proxies for the annual meeting of Piper shareholders scheduled for February 4, 1969. In January 1970, D. F. King & Co. submitted a statement to Piper for a total of about $59,000 consisting of $40,000, plus expenses and disbursements, for its advisory services and $10,000 for its assistance in the solicitation of proxies. Piper paid D. F. King's statement in February 1970.

ACC

136. [Proposed by Chris-Craft] The Bangor Punta prospectus dated July 18, 1969 stated that D. F. King & Co., Inc. had been retained by Bangor Punta for a fee of $5,000 plus expenses to assist Bangor Punta in the solicitation of tenders. This was the only compensation paid to D. F. King & Co., Inc. for its services relating to the Bangor Punta exchange offer.

ALL

136A. [Proposed by Piper] On August 1, 1969, Chris-Craft sent a telegram to all Piper shareholders stating:

> "CHRIS-CRAFT EXCHANGE OFFER FOR PIPER AIRCRAFT SET FORTH IN SUPPLEMENTED PROSPECTUS SENT TO YOU WILL EXPIRE MONDAY, AUGUST 4 AT 5 P.M. NEW YORK TIME. NEW YORK STOCK EXCHANGE HAS ANNOUNCED SUSPENSION OF TRADING IN PIPER EFFECTIVE MONDAY, AUGUST 11. STRONGLY URGE YOU TENDER SHARES. PLEASE ASK YOUR BANK OR BROKER TO WIRE BANK OF NEW YORK AT ONCE. TENDERS POSTMARKED AUGUST 4, 1969 WILL BE ACCEPTED.
> C LEONARD GORDON JAMES J ROCHLIS DIRECTORS"

ONLY COPY AVAILABLE

136B. [BP]

Chris-Craft's August 1, 1969 telegram (see Finding 136A) did not state that there would be over-the-counter trading in Piper shares after August 11, 1969, and that Piper shares had since April 1969 been traded on the PBWSE.

137. [Proposed by Chris-Craft] Chris-Craft received 112,089 shares on its exchange offer, which closed on August 4, 1969. Between August 12, 1969 and August 18, 1969 Chris-Craft purchased an additional 29,200 shares of Piper for cash.

ALL

Revised 12/16/70

138. [Proposed by Chris-Craft] Bangor Punta received on its exchange offer, which closed on July 29, 1969, 111,628 shares of Piper. Bangor Punta's shareholders ratified the Bangor Punta exchange offer on August 7, 1969. At a meeting of Piper's Board of Directors on August 12, 1969, Howard Piper, Thomas F. Piper, Charles W. Pool and Walter C. Jamouneau resigned as directors, Messrs. Nicolas M. Salgo, W. Gordon Robertson, David W. Wallace and John E. Flick of Bangor Punta and Lawrence R. Barnett of Chris-Craft were elected Piper directors. Mr. Salgo was elected the Chairman of the Board of Piper, and Mr. Flick secretary. As a result of these changes as of August 12, 1969, the Board of Directors of Piper consisted of the following persons:

Nicolas Salgo, Chairman
W. Gordon Robertson
David W. Wallace
John E. Flick, Secretary
William T. Piper, Jr., President
C. Leonard Gordon
James C. Rochlis
Lawrence R. Barnett

ALL

138A. [BP]

(a) The Bangor Punta Exchange Offer expired by its terms on July 29, 1969 and a total of 111,628 shares of Piper out of a total of approximately 467,300 shares then in the hands of the public other than Chris-Craft, were tendered to Bangor Punta for exchange.

(b) On July 24, 1969, the Chris-Craft exchange offer became effective and remained open until August 4, 1969. The holders of approximately 112,089 shares of Piper stock accepted Chris-Craft's offer instead of Bangor Punta's.

(c) After Chris-Craft closed its exchange offer on August 4, 1969, Chris-Craft owned 668,295 or approximately 41% of the outstanding Piper shares and Bangor Punta owned 732,918 or approximately 45% of the outstanding Piper shares, leaving approximately 243,600 or almost 15% of the outstanding Piper shares in the hands of shareholders of Piper other than Bangor Punta or Chris-Craft.

(d) Beginning on August 8, 1969, Bangor Punta began purchasing Piper shares for cash on the NYSE until August 11, 1969 and then over the PBWSE and by September 5, 1969, had acquired an additional 100,614 Piper shares at prices ranging from a high

of $84 on August 19, 1969 to a low of $66 on August 8, 1969 investing over $7,000,000 in cash. These market purchases made Bangor Punta the record owner of more than 50% of the outstanding Piper shares.

(e) Chris-Craft purchased 29,200 Piper shares after the close of its exchange offer between August 12, 1969 and August 18, 1969.

139 [Proposed by Chris-Craft] Between August 8, 1969 and September 5, 1969, Bangor Punta purchased 109,897 additional shares of Piper stock, principally on the Philadelphia-Baltimore-Washington Exchange, including 63,971 shares purchased through First Boston as its agent. The 109,897 additional shares made Bangor Punta the record owner of more than 50% of Piper's outstanding stock. Bangor Punta announced the fact that it had acquired over 50% of Piper's stock on or about September 10, 1969, which was reported in the press on September 11, 1969.

NC

139A. [Proposed by Piper] After the close of its exchange offer on August 4, 1969, Chris-Craft, between August 12th and August 18th, purchased 29,200 additional shares of Piper stock at prices ranging from $71.21 per share to $80.06 per share. Although additional shares of Piper stock were available for purchase after August 18, 1969, Chris-Craft did not make any further purchases of Piper shares.

141. [Proposed by Defendants] The attached table sets forth the quoted prices of the securities contained in the Bangor Punta and Chris-Craft exchange offers during the period July 18, 1969 through August 7, 1969.

MARKET PRICES OF BANGOR PUNTA & CHRIS CRAFT

	Bangor Punta								Chris Craft		
	Common				Warrants			Debentures	$2 Conv. Pref.		Warrants
69	High	Low	Close	OTC	Bid	Asked	OTC	Bid Asked	OTC		Bid Asked
7/18	24.125	23.00	23-1/2		7-1/2	- 8-1/2					
			-			-					-
7/22	23.375	23.00	23		7-1/4	- 7-3/4					-
7/23	23.375	22.00	22		6-3/4 7	- 7-1/2		83 - 88			-
7/24	22.50	22.125	22-1/8		6-1/2	- 7-1/2 7-1/4		83 - 88		44 - 46	2-3/4 - 3-1/4 2-3/4 - 3-1/4
7/25	22.375	20.875	20-7/8		6-1/4	- 7-1/4		81 - 85		44 - 46	2-3/4 - 3-1/2 2-1/2 - 3 2-1/2 - 3
7/28	21.25	21.00	21-1/8		6-1/2 6	- 7-1/4 7		81 - 85		43-1/2 -45-1/2 43 -45	2-5/8 - 3-1/8 2-5/8 - 2-3/4 2-1/2 - 2-3/4 2-3/8 - 2-7/8
7/29	21.25	21.00	21-1/4		5-3/4 5-3/4 7	- 6-1/2 - 6-3/4		78 - 82		39 -41	2-3/8 - 2-5/8 2 - 2-1/2 2-1/4 - 2-3/4 2-1/8 - 2-5/8
7/30	21.125	20.75	21-1/8		7			78 - 82		38 - 41	2-1/4 - 2-1/2 2 - 2-1/2 2-1/4 - 2-3/4

483A

	Bangor Punta								Chris Craft			
	Common				Warrants			Debentures	$2 Conv. Pref.			Warrants
69	High	Low	Close	OTC	Bid	Asked	OTC	Bid Asked		OTC	Bid	Asked
7/31	22.25	21.50	21-1/2			5-1/4		78 - 82	41 - 43		2-1/4	- 2-3/4
											2	- 2-1/2
8/1	22.875	21.75	22.675		5	- 5-1/4		-	40-1/2 - 42-1/2		2-1/4	- 2-3/4
											2-3/8	- 2-7/8
											2-1/4	- 2-3/4
8/4	24.00	22.75	23-3/8			6-1/2		82 - 86	40-1/2 - 42-1/2		2-1/2	-2-7/8
											2-3/8	-2-7/8
											2-1/2	
8/5	24.00	23.375	24.00		6-1/4 - 7-1/4			82 - 86	43 - 44-1/2		3	-3-3/4
					5-1/4 - 6-1/4						3	-3-1/2
											3	-3-3/4
8/6	24.75	23.375	23.75					82 - 86	44 - 46		2-7/8	- 3-3/8
									45		3-1/4	
											3-3/8	- 3-3/4
8/7	23.50	21.75	22.875		6	- 6-3/4		82 - 86	40 - 42		2-3/8	- 2-7/8
											2-1/2	- 3
											2-1/8	
											2-1/2	- 3
											2-5/8	

142. [Proposed by Chris Craft] On November 30, 1970, Bangor Punta was the record owner of 839,306 shares of Piper, or approximately 51.0% of Piper's outstanding stock.

Revised 2/4/71

144A. [BP]

In fiscal 1970, Piper reported a loss before income taxes of $1,574,000. If Chris-Craft had owned more than 50% of Piper's outstanding stock and had elected to consolidate Piper's earnings with its own, and if Piper's reported loss remained unchanged, Chris-Craft would have had to include a portion of this loss equivalent to its percentage ownership of Piper in its fiscal 1970 earnings report.

145. [Proposed by Chris-Craft] Chris-Craft owns 697,405 shares of Piper, or 42.6% of Piper's outstanding stock.

ALL

Revised 12/16/70

146. [Proposed by Chris-Craft] Chris-Craft paid $38,295,238 in cash for its purchases of Piper stock.

Revised 12/22/70

489A

Proposed by Chris-Craft

147. [redacted] / Chris-Craft has also invested at least $6,333,029 paid in value of Chris-Craft securities in its purchases of Piper stock, plus interest and expenses. The aforesaid valuation was made on or about August 4, 1969 using a value of $41.50 for the $2 preferred stock and $15.00 for the warrants to purchase six shares of common stock, based on the average bid prices during the offering period.

Trial testimony of Siegel, Gordon,
and Chris-Craft financials

*Le

151(A). [Proposed by First Boston] First Boston had no part in the decisions referred to in Finding 151.

151 [Proposed by Piper] Piper's two principal competitors in the manufacture and sale of light aircraft are Beech Aircraft Corporation and Cessna Aircraft Company. The schedule set forth below shows closing prices on the NYSE of Beech and Cessna on the first trading date of each month from January 1, 1969 to June 1, 1970.

Date	Beech	Cessna
Jan. 2, 1969	39-3	26-3*
Feb. 3	36-6	26-1*
March 3	36	27*
April 1	35-2	28
May 1	27-3	26-7
June 2	27-1	29-1
July 1	25-7	24-3
Aug. 1	22-7	26-2
Sept. 2	21-5	26-3
Oct. 1	18-7	23-7
Nov. 3	19-7	24-2
Dec. 1	18-4	23-6
Jan. 2, 1970	17-4	23-5
Feb. 2	16-1	17-6
March 2	16-1	20
April 1	15-2	18-3
May 1	13-3	16-3
June 1	10	14-7

* Adjusted for 2 for 1 split on March 5, 1969

Revised 12/17/70 492 A
[Adopted from SEC Finding No. 5]

154. [Proposed by Chris-Craft] The financial statements contained in Bangor Punta's registration statements and preliminary and final prospectuses carried the investment of Bangor Punta in the capital stock of the Bangor and Aroostook Railroad at $18,830,746 as at September 30, 1968 and $18,364,500 as at March 31, 1969. Note 1 to said financial statement in the final prospectus stated:

> "The consolidated financial statements include the accounts of Bangor Punta Corporation (Bangor Punta--formerly Bangor Punta Alegre Sugar Corporation) and its subsidiaries, except for Bangor and Aroostook Railroad Company and its subsidiaries (the Railroad) and Prodco Finance Co. (Prodco). Investments in subsidiary companies, including the Railroad and Prodco, are adjusted annually for the equity in subsidiaries' undistributed earnings. All material intercompany items have been eliminated in consolidation.
>
> "At September 30, 1965, the equity in the underlying net assets of the Railroad amounted to $29,791,456, which was $21,694,917 more than the then carrying value. Recognition of this excess was deemed appropriate but it was decided to limit the amount includible in stockholders' equity to $18,384,808 based upon a market price evaluation of the Railroad common stock. This resulted in increasing the carrying amount of the investment in the Railroad and stockholders' equity by $10,288,629. Such restated carrying amount of the investment was $11,406,648 less than the equity in underlying net assets. During

the year ended September 30, 1966 the carrying amount of the investment increased by $749,983, representing the cost of 559 shares of capital stock acquired from minority holders and the equity of undistributed earnings for the year, to the amount of $19,134,791, or $11,449,312 less than the equity of $30,584,103 in the underlying net assets of the Railroad. During the year ended September 30, 1967 the carrying amount of the investment decreased by $336,488, representing the excess of dividends paid to the parent over the parent's equity in the earnings of the Railroad, to $18,798,303, or $11,451,123 less than the equity of $30,249,426 in the underlying net assets of the Railroad. During the year ended September 30, 1968 the carrying amount of the investment increased by $32,443, representing the cost of 120 shares of capital stock acquired from minority holders and the equity in undistributed earnings for the year, to the amount of $18,830,746, or $11,465,081 less than the equity of $30,295,827 in the underlying net assets of the Railroad.

The Bangor Punta registration statement and preliminary prospectus at page 27 and final registration statement and prospectus at page 29 contained the following statement under the heading "Description of Bangor Punta's Business": "Bangor Punta has operating units in the following industries; . . . transportation." The following appears at page 32 of the registration statement and preliminary prospectus and page 34 of the final registration statement and prospectus:

TRANSPORTATION

"The Bangor and Aroostook Railroad is an all-freight line owning and operating approximately 800 miles of track located wholly within the State of Maine, running from Searsport on the Atlantic Coast north to the Canadian border. On September 30, 1968, it owned, subject to security interests, or leased 45 diesel locomotives and 5,834 freight cars. Approximately 70% of the Railroad's freight revenue is derived from potatoes, paper, wood pulp and petroleum products. More than 99% of the freight hauled has either its origin or its final destination, or both, on the Railroad's line. The Railroad receives intense competition from highway carriers and also competes with Canadian railroads at several points on the line. It is a Class I carrier, subject to comprehensive regulation by the Interstate Commerce Commission with respect to rates, routes, accounting practices and other matters. About 1,100 persons are employed by the Railroad, 90% of whom are union members.

"In fiscal 1968, the Railroad accounted for 6% of Bangor Punta's total revenues and 1% of its operating income. Unaudited figures for the first six months of fiscal 1969 indicate that the Railroad accounted for 5% of Bangor Punta's total revenues and incurred an operating loss equal to 4% of Bangor Punta's total operating income. An operating loss of this magnitude is not unusual during the first half of the Railroad's fiscal year."

155. [Proposed by Chris-Craft] The minutes of the April 1, 1969 meeting of Bangor Punta's Board of Directors record the following concerning the Bangor and Aroostook Railroad (the "Railroad"), 98.7% of the stock of which was owned by Bangor Punta or its subsidiaries:

> "Organization and Long Range Planning.
>
> Mr. Salgo* stated that he wished to discuss with the Board the general philosophy of the types of business in which Bangor Punta should be involved, and also share with the Board some of the thoughts of management in this connection. He stated that there had been under consideration for some time the question of whether minority interests in some of the more attractive operations, such as the Leisure Time and Public Security Groups, should be spun off, but that he, Mr. Robertson and Mr. Wallace are in unanimous agreement that this should not be done. Instead, there have been discussions about the possibility of spinning off, either in whole or in part, those companies where growth is not developing as rapidly as it is throughout the remainder of the Corporation. In particular, he stated that such discussions had centered upon the Process Engineering Group, the Railroad and the Textile Group. In this connection, he pointed out that the Textile Group is a substantial contributor of cash even though it is not in a growth area. Mr. Salgo stated that the earnings of the Process Engineering Group are small and we need to seriously consider whether this group could be sold to another company. With respect to the Railroad, he stated that there is a question as to whether it should eventually go into a larger railroad system.

ALL

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* Chairman of the Board

"Mr. Salgo further stated that it would be very helpful if a committee from the Board of Directors could study the possible divestiture of the Bangor and Aroostook Railroad resulting in public ownership of it, either in whole or in part. He asked Mr. Curtis M. Hutchins to serve as Chairman and Messrs. George H. Seal and Robert G. Stone to serve as members of this Committee, with Mr. W. Jerome Strout as an ex-officio member and advisor to the Committee."

HLC

156. [Proposed by Chris-Craft] Mr. Salgo testified concerning the three-man committee referred to in Finding 155 (Salgo SEC Dep., pp. 17-24):

MR. VON STEIN: Was a decision initiated and recommended by the other members of the board and you?

WITNESS SALGO: I don't know if you take "initiated" to mean "by other members of the board"; or are you referring to "management" or "outside members"?

MR. VON STEIN: I am not specifying any group at the moment.

WITNESS SALGO: Management members, yes; outside members, not. There was nothing we knew about it, to the effect that outside members might have taken a very strong initiative. I must say that we had a full agreement, once the case was presented.

MR. VON STEIN: Where did the initiative come from?

WITNESS SALGO: From management.

MR. VON STEIN: And more specifically?

WITNESS SALGO: From operations, because there is where you have this funny feeling for how much control there is and prediction.

MR. VON STEIN: How was this brought to the board's attention?

WITNESS SALCO: Through a presentation -- I don't know whether it was from me or Mr. Wallace.

MR. VON STEIN: On behalf of management?

WITNESS SALCO: Yes, on behalf of management.

MR. VON STEIN: You considered your rôle to be not only that of an analyst or judge of problems or initiatives by management, but also that of an initiator for the program?

MR. RYAN: That question is highly improper, to my mind.

WITNESS SALCO: You said that I told you I considered myself a judge; but I said I considered myself as a catalyst -- and I mean the word "catalyst" exactly in its chemical sense. I was looking for and extracting ideas and opinions, to pull them together into a pattern and see whether they would correspond to our long-range aims. In some cases we may have had to compromise to reach a unanimous decision. -- That is not the function of a judge; and that is why I corrected your statement. --

MR. VON STEIN: But --

WITNESS SALCO: -- In this procedure, I have all rights and obligations to initiate --

MR. VON STEIN: -- and advocate?

WITNESS SALCO: Yes, and advocate hopefully for a unanimous idea -- but sometimes not getting it.

MR. VON STEIN: Let's now carry this into the decision to sell the B & A. Where did the initiative of that idea come from?

MR. RYAN: When you say "to sell" the railroad, do you mean what took place in October 1969; or do you mean to sell or distribute Bangor Punta's interest in the railroad?

MR. VON STEIN: To sell the railroad.

WITNESS SALCO: In general?

MR. VON STEIN: Yes.

WITNESS SALCO: It was probably since the origin

of the railroad board -- preceding even my getting involved with it before 1959 -- that the reason they hired me in 1959, as a consultant for diversification purposes, was that they felt that the railroad did not promise sufficiently for the corporation.

MR. VON STEIN: I think, that goes toward the broader avenue of the disposition suggested by your Counsel, as opposed to the narrower disposition, that I am referring to, --

WITNESS SALCO: Would you be more specific?

MR. VON STEIN: -- of selling the railroad, as it was sold in 1969.

WITNESS SALCO: Okay.

MR. VON STEIN: Where did the initiative come from?

WITNESS SALCO: This particular initiative came definitely from the railroad itself, respectively, from the directors who seemingly had close historical ties with the railroad and who -- or at least some of whom -- took an active role in the matter, from the beginning of the year, so to speak, to analyze and seek ways of disposing of the railroad from the corporate portfolio.

MR. VON STEIN: Could you give us some specific names?

WITNESS SALCO: Yes -- Mr. Curtis Hutchins, Mr. Seal, and Mr. Stone were named as a committee to study and

recommend the disposition of the railroad. I think, that was in the first quarter of 1969 -- in April 1969.

MR. VON STEIN: Who chose this committee?

WITNESS SALCO: Technically, I think, I did. Effectively, I responded to a visible desire of a group on the board.

MR. VON STEIN: Did these three men choose themselves?

MR. RYAN: He didn't say that.

WITNESS SALCO: I didn't say that.

MR. VON STEIN: No, he didn't say they did. -- I merely asked that as a question.

WITNESS SALCO: I had contemplated that their desires would be negative and positive. But, when you are leading a group of people as their chairman, you have a certain feedback of what their desire is, and when you are put into the chairman's seat, you know what is up for action.

BY MR. BELKIN:

Q What group of the board decided who these individuals should be?

A I would say that everyone agreed on the board that these were the people who would know the most about the railroad, because they would have closer ties with the railroad -- and that was what I called the "feedback". I thought they were the most desirable people to make the studies and reports.

Q Could you say what particular expertise Mr. Stone had?

A I think, his expertise consisted of his being a Bostonian who was familiar with New-England problems, as a retired senior member of a very well-known brokerage company. He was a specialist in railroad securities and railroad-management appraisals and basically a very sound businessman. I have the highest regard for him.

Q Do you know what particular expertise Mr. Seal had?

A Mr. Seal was a Bostonian and was in New England for many many years. He was a director of the railroad and a user of the railroad or supplier of the railroad for his company. I think, there was a very closely-knit tie with some members of the railroad's top-management.

MR. VON STEIN: Were those committee members, as well as the people with expertise for the functions for which they were appointed -- were they also those members of the board who were at that time leaning toward the disposition of the railroad, more than other board members?

WITNESS SALGO: I couldn't answer that question; because my recollection is that there was an almost-unanimous desire expressed on the board to dispose of the railroad, --

MR. VON STEIN: In one way or another?

WITNESS SALGO: -- one way or another, and within reason.

BY MR. HELKIN:

Q Can you give us the time sequence on that?

A What do you mean by that?

MR. VON STEIN: Was this unanimous desire voiced as of the time you appointed the committee?

WITNESS SALGO: It was strong enough to definitely want to receive some concrete suggestions, after many years of talking about the subject. In this respect, I think, there was a definite evolution at that point.

BY MR. HELKIN: At this point I would like to introduce, as Salgo Exhibit No. 1, a memorandum from Mr. Salgo to Mr. W. Gordon Robertson and Mr. David W. Wallace, dated March 2 , 1939, -- which was introduced during Mr. Flick's testimony as Flick Exhibit No.1 -- which is attached to a letter dated March 13, 1939, from Mr. Robert A. Page to Mr. Nicolas Salgo. Will the reporter please mark this document as Salgo Exhibit No. 1.

(Said document was marked Salgo Exhibit No. 1.)

Q Could you identify this Salgo Exhibit No. 1, please, Mr. Salgo?

A Yes, sir, I can.

Q Can you tell us what it is?

A This is an internal memorandum on the subject of the railroad disposition.

Q Could you tell us why, at this particular time, you wrote this memorandum, and I am particularly directing myself to the second paragraph, where the first two words are "I believe". Was there any particular reason why you wrote this memorandum at that particular time?

A Evidently, the apropos was this unsolicited letter from Mr. Robertson to Mr. Page, who was a director of the company. That is the only apropos that I can see.

Q When you said that you believed the time had come to make a positive decision about a supplementary or separate use of the railroad, can you tell us why you believed this particular time had come?

A Because we were talking about it for so long and evidently some of our shareholders also began to become restless about it -- which restlessness was produced by this letter.

Q Does this memorandum represent a turning-point in the thinking of Bangor Punta Corporation or your own thinking with respect to the railroad?

A Absolutely not. I wouldn't say that I could describe it to you as one of the little drops even which I would consider in decision-making. There is no new event reflected in this memorandum whatever.

157. [Proposed by Chris-Craft] On May 12 and May 15, 1969, Curtis M. Hutchins, Chairman of the Committee appointed at the April 1, 1969 Board meeting, and a director and member of the Executive Committee of Bangor Punta, met with Frederic Dumaine, Jr., Chairman of the Amoskeag Company, and discussed the possible sale of the Railroad to Amoskeag Company.

158. [Proposed by Chris-Craft]

(i) Mr. Hutchins testified at his deposition by Chris-Craft concerning his meeting with Mr. Dumaine on May 12 as follows:

Q You did have a meeting with Mr. Dumaine on May 12th; is that right?

A Yes.

Q Do you recall where the meeting took place?

A At the Pinnacle Club, in New York

Q Did you come into New York especially for the purpose of meeting with Mr. Dumaine?

A Living in New York -- we live in New York in the winter and I was in residence, so to speak, and he came to New York from Boston. [p. 48]

Q Did you make any notes or memos of this meeting with him?

A No.

Q Do you recall it?

A Yes.

Q Can you tell us what happened at the meeting?

A Mr. Dumaine asked if Bangor Punta wished to dispose of the railroad, and I said I thought it might, and I said that it depended for how much -- or what

dollars for it, and I said that that was an awfully low price in relationship to whatwe were carrying the book on, but I would carry the message back to the management.

Q Was that the whole conversation?

A Yes, in essence.

Q I think you misspoke when you said that you told him it was a low price in relation to what you were carrying the book on. I think you meant what you were carrying it on the books for.

A That is what I meant to say. [p.49]

At his examination by the SEC in the course of its private investigation, Mr. Hutchins testified concerning his meeting with Mr. Dumaine on May 12 as follows:

Q What occurred at this first meeting on May 12th?

A I told Mr. Dumaine that there was interest on the part of Danger Punta in selling the railroad, and how much would he pay for it; was he interested, he said yes, and I said, how much do you want to pay for it, and he said $5 million.

Q Did he say anything else of a substantive nature at that May 12th meeting?

A No. I asked him, did he want to buy assets or stock, and he said he didn't care at that point.

Q What was your response?

A My response was that I would take it back to the management of Bangor Punta and the board and see whether or not they would accept it.

Q What were your respective positions then at the conclusion of the May 12th meeting?

A That he had made an offer for the railroad of $5 million, and I was to get back to him as to whether the offer would be accepted or not.

Q At the time of the meeting what authority did you have, authority from Bangor Punta?

A At the time of the meeting I had no authority, except to explore the various possibilities of divesture of the railroad.

(ii) Mr. Hutchins testified at his deposition by Chris-Craft concerning his meeting with Mr. Dumaine on May 15, 1969 as follows:

Q In fact, you did have a meeting with Mr. Dumaine again between May 12th and May 21st; am I correct?

If you look in your diary of May 15th --

A I had a meeting with Mr. Dumaine in Boston on May 15th.

Q Do you recall whether you spoke to Mr. Wallace or Mr. Salgo about the Dumaine proposal between May 12th and May 15th?

A I can't recall.

Q Do you recall whether you took any action with respect to that proposal between May 12th and May 15th?

A I just don't remember; what do you mean by "action"?

Q Any studies, any analyses of it.

A No.

Q Did you report his proposal to the other members of your committee, Seal or Stone?

A Yes.

Q When did you report to them?

A I had a meeting with Mr. Seal and Mr. Stone, a luncheon meeting the same Thursday, May 15th, and I do not recall whether that was prior or after seeing Mr. Dumaine that day.

Q Did you go to Boston to meet with Mr. Dumaine?

A Yes.

Q What happened at this meeting?

A I can't recall that anything happened other than his reaffirmation of the five million dollar price and that was his highest price, that he felt he could justify -- I think it was at that meeting that I carried from Bangor to Boston some pertinent cash flow figures, balance sheet figures of the railroad, and a five-year forecast of the railroad, both cash and profit and loss for him to study. I think that was the purpose of the meeting. It was for me to deliver to him those papers.

Q Did you try at this meeting to see whether you could get him to raise his price?

A I am sure I did in a sentence or two, and I am sure in a sentence or two he said no.

Q Did you have any discussions with him at this meeting about the possibility of there being a kicker in the event the railroad was turned around and showed profit?

A Not at that meeting, no.

Q Did you discuss it at the 12th?

A No.

Q Now, again, do you remember what you said to Mr. Seal and Mr. Stone on the 15th about your negotiations and discussions with Mr. Dumaine?

A Yes; I reviewed with them his price. I reviewed with them the alternatives to accepting Mr. Dumaine's price and a sale to him and we came to the unanimous conclusion that the sale to Mr. Dumaine for five million dollars was, in our opinion, the three of us, the best course for Bangor Punta to pursue. [pp. 53-55]

(iii) Mr. Hutchins testified at his examination by the SEC concerning his May 15 meeting with Mr. Dumaine as follows:

Q Do you recall when your next meeting with Mr. Dumaine was?

A On May 15th.

Q What occurred at this meeting? Do you recall?

A I furnished Mr. Dumaine copies of five year forward budgets of the railroad, five year forward cash flows, which had been furnished to me by Mr. Straud, who was then president of the railroad, and went over them with him.

We discussed the possibility of his buying assets rather than stock.

At that stage of our knowledge of the tax situation, it appeared that it would be impossible for Mr. Dumaine to bypass that and still have the railroad survive as a profitable cash break even entity, and I think that's

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I left him with the thought that he and his staff were going to study the material I had given him as a matter of information.

It had no effect on the offer originally made one way or the other.

Q Had he asked for copies of budgets and cash flows at your May 12th meeting?

A I don't remember, but it would be in the ordinary course of business, if he were seriously considering the railroad, he would want those, and whether he requested them or whether I offered them, I don't remember.

Q Do you recall what his position was at this May 15th meeting with regard to the purchase of assets versus stock?

A It appeared to both of us at the time, erroneously, that it would not be feasible for him to buy assets, so we continued to talk about sale of stock at that point.

Q Could you tell me what you meant by that word, erroneously?

A Further investigation indicated that Mr. Fenaine would have been able to purchase assets and have a sufficient depreciation to carry a forward cash flow sufficient to finance the enterprise.

[pp 25 - 30]

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159. [Proposed by Chris-Craft] The minutes of the Executive Committee meeting of Amoskeag Company on May 20, 1969 reflect the following:

> "President reported he had tentatively obligated the Company to pay $5,000,000 for Bangor & Aroostook Railroad, subject to Governmental Agencies' approval. Mr. Stone announced he was a director of Bangor Punta and would not take a position."

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160. [Proposed by Chris-Craft] On May 20, 1969 J. Lushing, an accounting employee of Bangor Punta, wrote a memorandum to defendant Wallace in which he stated:

> "I spoke this afternoon with Tom Wieler of Peat, Marwick, Mitchell & Co. regarding the accounting treatment on any loss on the sale of the B & A Railroad. The Railroad is carried in our financial statements at approximately $18.5 million and the sale for $5 million would therefore result in a loss of $13.5 million. It is assumed here that we sell the stock rather than the assets and, therefore, no consideration is given to any tax effect.
>
> "Mr. Wieler feels it would be very hard to charge this loss off directly to retained earnings. He feels it would be an extraordinary charge at the bottom of the income statement, i.e., similar to our gain on the sale of INA. It appears from the accounting bulletin that this sale would not meet any of the criteria for defining a prior period adjustment, which is the only type of an item which can be charged off directly to retained earnings. I mentioned the writeup we made of the Railroad for about $10 million in 1965, and whether we might consider the loss to the extent of this amount to be an adjustment of this. He is inclined to doubt this treatment. However, if we discuss it with the SEC and get it accepted, then I'm sure he would go along with it. You may be aware that the original writeup of the Railroad was a very sore point with the SEC at the time."

Revised 12/13/70

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161. [Proposed by Chris-Craft] The minutes of the May 21, 1969 meeting of Bangor Punta's Board of Directors record the following concerning the Railroad:

[attached]

Mr. Curtis M. Hutchins, as Chairman of a special committee appointed by Mr. Salgo at the Board of Directors meeting held April 1, 1969 (Reference: BPC-4-1-69-28), reported that he and Messrs. Robert G. Stone and George H. Seal (members of the special committee), have just completed a study of the situation with respect to the Bangor and Aroostock Railroad and wish to submit to the Board their unanimous report through Mr. Hutchins.

Mr. Hutchins stated that there appears to be three possibilities which could be adopted with respect to the future of the Railroad. Bangor Punta might keep the Railroad as is, merge the Railroad with another railroad if that were possible, or sell the Railroad at the best possible price.

Mr. Hutchins stated that keeping the Railroad is not very appealing. He pointed out that because of the increased use of trucks and the restricted nature of the territory involved, it is doubtful that the traffic on the Railroad will increase. It appears that if the Railroad is to break even over the next five years, it will be necessary to spend substantial amounts of money for new freight cars and other equipment. He also stated that in discussing the situation with Mr. W. Jerome Strout, President of the Railroad, it appears that the amount of money to be expended might be as much as $5,000,000. Under these circumstances, Mr. Hutchins pointed out that it becomes more and more difficult to justify retention of the Railroad.

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Mr. Hutchins next discussed the second possibility, that is, consolidating with another railroad. In this connection, he felt that a combination with the Boston & Maine Railroad, if otherwise possible, might result in Bangor Punta's receiving a third to a 40% interest in a new company. The consideration, however, would be in the form of securities rather than cash. Mr. Hutchins did not feel that this would be a palatable solution.

Mr. Hutchins next considered the question of selling the Railroad and to whom it might be sold. He pointed out that neither the Penn Central nor the Norfolk and Western Railroads have any known interest in the Bangor and Aroostook Railroad and a merger with either of these railroads is very unlikely. He stated that the only person whom he knew who might be interested in the Railroad is Mr. F. C. Dumaine, Jr., Chairman of Amoskeag Company. Mr. Hutchins stated that he has had preliminary discussions with Mr. Dumaine who had indicated that he might be willing to pay $5,000,000. in cash, a combination of cash and Bangor Punta securities, or Bangor Punta securities for the stock of the Bangor and Aroostook Railroad owned by the Corporation. At this point, Mr. Salgo asked whether it might be wise to offer to Mr. Dumaine 51% of the stock of the Bangor and Aroostook Railroad at book value, with an option to purchase the remaining 49% at a higher price, with a total consideration, therefore, of approximately $7,000,000.

(At this point, Mr. Flick was called away from the meeting and Mr. Wallace acted as Secretary for the remainder of the meeting.)

Mr. Hutchins stated that, in his opinion, Mr. Dumaine would not agree to a price of $7,000,000., but that he probably would be able to obtain the approval of the Board of Directors of Amoskeag Company at a price of $5,000,000.

Mr. Hutchins stated that he is not asking for an approval by the Corporation's Board of Directors at this time, but only the authority to continue discussions with Mr. Dumaine. He stated that he wishes to first ascertain whether Amoskeag Company is willing to submit a definitive proposal.

Mr. Salgo next suggested that he would like to have Mr. Dumaine transfer to the Corporation 22,500 shares of Bangor Punta $1.25 Convertible Preference Stock as consideration for an option on 51% of the Railroad, the option to be for sixty days with the provision that the stock would be forfeited if the option is not exercised. In discussing Mr. Salgo's proposal, Mr. Strout pointed out that Mr. Dumaine also wishes to enter into an arrangement with the Maine Central Railroad; he does not believe the Maine Central Railroad will agree if such an agreement existed between Amoskeag Company and Bangor Punta Corporation.

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After considerable discussion, it was the consensus of the Board that Mr. Hutchins should attempt to negotiate on the 49/51% basis suggested by Mr. Salgo, but that he has the authority to negotiate on the basis of a sale of 100% of the Bangor and Aroostook Railroad subject to further investigation of accounting and tax ramifications of such a transaction and approval by the Board of Directors or the Executive Committee of the Board of Directors.

162. [Proposed by Chris-Craft] Mr. Hutchins testified as follows at his examination by the SEC concerning, among other things, his report to the Bangor Punta Board of Directors in May 21, 1969:

Q Was this the first time, May 21st that you had reported to the board of directors?

A Yes.

Q What methods of disposition were looked into by your committee, and you can refer to this -- the minutes here, which is Exhibit No. 2 for identification for any refreshing of your recollection that you might need.

MR. RYAN: Off the record.

MR. BELKIN: Off the record.

(Discussion off the record.)

MR. BELKIN: Back on the record.

A There are three possibilities for disposing or handling the railroad situation.

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One was to keep it and continue to operate it indefinitely.

The second was to merge it with another railroad, and the third was to find a buyer.

We felt it not advantageous -- our committee felt it was not advantageous to Rangor Punta to continue operating the railroad because profits -- the possibility of adequate return on the investment seemed impossible to obtain.

The railroad would require large amounts of capital to keep it going, and the manner in which a good railroad ought to be operated, and we cast that aside as being an alternative we didn't like.

The second possibility was to merge it with another railroad.

In short that seemed impossible to do, because the Maine Central, our neighbor, had been approached over a 10-year period with no positive results, and going a step away, the Boston & Maine Railroad was in great difficulty.

Another step away there seemed no likelihood, New York Central and Pennsylvania, later to become the Penn Central, or the Norfolk or Western would be interested in

acquiring it.

So, therefore, a sale seemed to be the most promising alternative.

Now, we so recommended to them we had a possible buyer in Frederick C. Dumaine of the Amoskeag Company, with whom I had been in touch, and who had offered us $5 million for the railroad, and I so reported to them and gave that recommendation to them as a recommendation of the committee with which the other members agreed, other members of the committee agreed.

Do you want this back?

Q Yes.

In terms of the time sequence, could you tell us -- you said there was little likelihood of a merger -- when this became apparent, the fact that there would have been little likelihood of merger?

Was this at this May 21st meeting that it was already apparent to you?

A Yes. It had been apparent to me for some years or some months, and it was a recapitulation of opinions I had built in.

Q Were there any other possibilities discussed or considered by your committee, any other possibilities with respect to the disposition of the railroad?

A No.

Q How did you or the committee limit yourself to these possibilities; in other words, either keeping the railroad, merging it or selling it?

A Our minds could not conceive of any other alternative. We came to the end of the road.

Q Did anyone ever consider spinning off the railroad at around this time, early 1969? Do you recall?

A I don't remember the time sequence. Mr. Salgo had offered the suggestion that the best could be had by declaring a dividend in the form of railroad stock.

The committee never seriously considered that.

Q Could you tell us why not?

A It seemed the last resort kind of a disposition.

Efforts were made to keep the railroad and its organization, its employees, and its service to the public intact, so that if -- the next owner would be operating a railroad in the same manner it had been operated over the years as a good going concern.

Q You mentioned the possibility of merging the railroad with another railroad. You mentioned that in the minutes of May 21st.

A Yes.

Q Could you tell us how that would have worked out; in other words, what your thinking was at the time, if a merger had occurred?

SANSOME Shot Cells - Daily Copy

A Since 1959 I had tried to merge the Bangor & Aroostook with Maine Central, because together they will then serve the State, whole state of Maine, with a saving of a substantial amount of overhead, and if the operating of the trains had been merged, the track work had been merged, the cars had been merged, I thought it would -- the joint enterprise could save on the order of a million dollars a year, and I felt it was a thing highly to be desired, though I never could accomplish it.

Q What was your barring your path to the merger?

A The management of Maine Central did not seem to be as eager for it as I did, and they refused to negotiate seriously about it.

Q Had the management of the Maine Central changed from 1951 through 1969?

A No. I might be able to correct that, it was '53 instead of '51. It's whenever Spencer Miller became president I can't remember whether it was '51 or 1953.

Q Now, there was one offer mentioned at this meeting of May 21st, Mr. Dumaine's offer?

A Yes.

Q Were there any other offers for the railroad discussed at this meeting?

A No.

Q Were there any other offers outstanding at this

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time that your committee knew about?

A No.

Q What was your reaction to the offer of $5 million by Mr. Dumaine --

A I thought --

Q (Continuing) -- in view of the fact that your investment was a good deal more?

A I felt that Mr. Dumaine was the only logical customer for the railroad.

He offered $5 million for a railroad which was then earning $~~250~~ 50,000 a year, and on a value based on a reasonable multiplier, it seemed to me to be an ample offering.

Q Do you know how he arrived at his figure of $5 million?

A No, I don't.

Q Did you ever ask him?

A What?

Q Did you ever ask him?

A No.

Q Was there any surprised registered on the part of anyone at this meeting on May 21st that the offer was $5 million?

A I feel there was a sense of disappointment that it wasn't more only.

[pp 13-18]

163. [Proposed by Chris-Craft] Mr. Hutchins testified as follows at his examination by the SEC concerning his discussions with Mr. Dumaine of the suggestion by Mr. Salgo at the May 21 Board meeting of Bangor Punta that "it might be wise to offer to Mr. Dumaine 51% of the stock of the Bangor and Aroostook Railroad at book value, with an option to purchase the remaining 49% at a higher price, with a total consideration, therefore, of approximately $7,000,000":

Q In the minutes of May 21st there is a suggestion a counter proposal --

A Yes.

Q (Continuing) -- by Mr. Salgo, I believe.

A Yes.

Q Did you ever relay that counter proposal to Dumaine?

A Yes.

Q When?

A I don't remember. That was May -- just a minute. Let me refer to my notes.

It must have been by telephone between May 21st and May 27th. I don't recall the time.

Q Do you recall what his response was?

A Yes. He said no.

Q Did he give any reason as to why he said no?

SALGO

A No. He just said he had made up his mind what was going to do, substantively as I reported in the letter of May 27th.

He said that's all he'd do.

Q In other words, he didn't promise to pay maybe little more than 5 million?

A He said flatly he wouldn't.

Q Did you ask him why he was so adamant about illion?

A No, in the sense that that's his business.

Q Did anyone ask you whether you had reported the nter proposal to Mr. Dunkine, anyone on Bangor Punta's rd or management?

A I don't recall anything specific. I am sure ing been asked to make that proposal to Mr. Dunkine, that n he said no, I must have reported it to someone, and

l guess it was Mr. Robertson who was then chairman gor Punta, on the assumption that he would relay it associates, Mr. Wallace and Mr. Salgo.

I don't recall talking with anyone about it management of Bangor Punta, except Mr. Robertson.

[FF 41-43]

Revised 12/13/70

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164. [Proposed by Chris-Craft] On May 27, 1969, Hutchins delivered to Dumaine an unsigned document dated May 27, 1969 on the letterhead of Bangor Punta reading as follows:

BANGOR PUNTA CORPORATION

84 HARLOW STREET • BANGOR, MAINE 04401 • TELEPHONE AREA CODE 207 • 945-5011

May 27, 1969

Mr. F. C. Dumaine, Jr.
President
Amoskeag Company
Prudential Center
Boston, Massachusetts 02199

Dear Buck:

I understand that you and I have agreed, subject to appropriate approval by the ICC, on the sale to Amoskeag of all Bangor and Aroostook Railroad stock owned by Bangor Punta on the following basis:

1. A sale price of $5,000,000., payable by delivery of all Bangor Punta $1.25 convertible preference stock now owned by Amoskeag (approximately 22,000 shares), plus Bangor Punta common stock sufficient to make up the difference to $5,000,000. The preference stock would be valued at market at the time of closing and the common would be valued at its actual cost to Amoskeag--or $5,000,000. in cash, at our option.

2. A fifty-fifty split between Amoskeag and Bangor Punta of any "windfall profits" accruing to Bangor and Aroostook Railroad through real estate or industrial developments in the Searsport area with particular reference to a proposed aluminum plant which would result in large scale commercial increments in profit or land development sales on Cape Jellison or Sears Island during the next five years, if such incremental "windfall profits" prove to be substantial and significant.

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The Railroad has outstanding 179,810 shares of stock of which all but 2,354 are owned by Bangor Punta (About 98.7%). Of the remaining shares, 1200 are owned by one person and his wife; and the balance is owned by about 20 other people.

Although I have general authority from the Bangor Punta Board to make tentative exploration regarding the sale of the Railroad, any understanding between you and me is subject to the Board's approval. I expect you may want the same understanding regarding the Amoskeag Board.

I suggest, too, for employee moral purposes that no publicity be given to any tentative understanding between us until a definitive deal is ready to move ahead.

I will leave this letter with you with the thought in mind that if I do not hear from you within the next day or two that your understanding squares with mine.

Yours Sincerely,

Curtis M. Hutchins

(b) Hutchins testified at his deposition by Chris-Craft concerning the foregoing document as follows:

Q If I tell you on May 29th and June 2nd Mr. Dumaine, Sr.'s diary reflects telephone calls to you, would that in any way refresh your recollection of when you managed to speak to the father?

A Let me organize myself on dates.

I wrote Mr. Dumaine a letter which reflected an understanding between him and me and which included a recapture of Bangor Punta if Sears Island was sold. It was then under option to a company that hoped to build an aluminum plant.

MR. LIMAN: Mark this Chris-Craft Exhibit 128.

(Letter marked Chris-Craft Exhibit 128 for identification, as of this date.)

Q Have you seen Exhibit 128?

A Yes.

I had talked to Mr. Dumaine on May 27th. I was confusing my meeting with him on the 12th.

I did go down on May 27th and talked with him.

Q On the telephone?

A No, I went to Boston. I handed him that letter and we discussed the conditions and he said they were agreeable.

Q That is Junior?

A No, Senior. Senior is junior. Dudley is the son.

Q You discussed it with the father, the terms of this letter, and he said this was acceptable?

A Yes.

Q Did you leave a copy of this with him?

A I did.

Q He said it was acceptable?

A Yes.

Q Can you tell me if you recall whether you signed it?

A I did not.

Q Was there a reason?

A I felt that, on reflection, having written it, this reflected a meeting of the minds between him and Mr. F. C. Dumaine, Jr., as to the agreement

he and I, on a personal basis had reached, and it was not a thing I could commit Bangor Punta or its board to, so I left it unsigned.

Q You did have in a letter a statement that the agreement was subject to the approval of your board?

A Yes.

Q Did you discuss this letter with anybody at Bangor Punta before you gave it to Mr. Dumaine?

A Yes, I sent a copy to Mr. Robertson, whose office is in Bangor, where my office was, and I sent him down a copy after it was transcribed.

Q Did he make any changes?

A No, he made no changes, but he said that this might not receive concurrent from the Bangor Punta management, so why didn't I leave it unsigned, which I did.

Q Did you discuss it at all with any other officials of Bangor Punta?

A No. Not that I recall.

Q Did you disclose to any of the members of Bangor Punta management, after May 27th, that you had given this letter to Mr. Dumaine, other than Mr. Robertson?

A I assume I must have at the meeting in New York of June 3rd, at which the other two members of Bangor Punta's management were present.

Q Did anybody at that meeting ask you to recall this letter?

A No.

Q Did anybody tell you that you should send them a letter nullifying this?

A No.

Q How was it left in connection with this letter?

A It was left that Bangor Punta management could not agree to it until it had had a considerable amount of time to explore the tax impact or the ameliorating effect on Bangor Punta's earnings statement of the sale of the assets, and I so reported that to Mr. Dumaine.

Q When you say its sale of assets, you are talking about a change in form in the transaction?

A Yes. This contemplated a sale of stock; I think I said that.

Q I take it, then, nobody criticized you for having given him this letter?

A No.

[pp. 68-71]

(e) Hutchins testified during his examination by the SEC at its private investigation concerning the above document as follows:

Q Well, do you recall the next time that you were in contact with Mr. Dumaine?

MR. RYAN: Either by telephone or face to face?

MR. BELKIN: Yes.

A I met with him in Boston on May 27th, and I must have been on the telephone -- telephonic communication in order to make the date.

I don't recall any other phone calls specifically no.

Q What was the purpose of the meeting of May 27th? Do you recall?

A Yes. I had written Mr. Dumaine a letter giving him my understanding of the arrangement we had made for the sale, and suggested to him some other specific arrangements, as I remember it, to do with his paying part of the purchase price and some stock he held in Bangor Punta, and also reserving in Bangor Punta any windfall profits which might occur in the future, or the sale of some of our real estate.

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Q Had you and he agreed to these additional items, this windfall of profits, and you mentioned one other item prior to that, had you agreed to these or discussed these --

A He and I did, yes.

Q (Continuing) -- at these various meetings?

A No.

MR. RYAN: Would you repeat that question and answer back again, please? I think there is some confusion.

(Whereupon, the last question and answer were read back by the reporter.)

MR. RYAN: Did you and he agree or discuss, that' the problem.

Q Let me backtrack and ask you whether you and he had discussed the windfall profits and the -- that one other item that you mentioned.

A He and I had not discussed, I think, to the best of my knowledge, the windfall profits.

I think you refreshed my memory now that I did have a telephone conversation with his son, Dudley Dumaine, on the payment -- using stock he owned in Bangor Punta as payment, as to what price it would be tendered at or -- yes, at what price would be used, that method of payment.

I believe I did do that.

Q All right.

MR. BELKIN: At this point I would like to introduce a letter on the Bangor Punta Corporation's stationery dated May 27, 1969 from Curtis M. Hutchins to Mr. F. C. Dumaine, Jr., President, Amoskeag Company.

This would be Exhibit No. 6 in Mr. Flick's testimony.

Mark that as Exhibit No. 5 for Mr. Hutchins.

(Whereupon, the above-referred to document was received and marked by the reporter as Hutchins' Exhibit 5 for identification, as of this date.)

BY MR. BELKIN:

Q Could you identify this letter, Mr. Hutchins, please, which is Exhibit No. 5 for identification?

A I do.

Q Will you tell us, is that the letter that you had previously referred to --

A Yes.

Q (Continuing) -- as the letter that you delivered?

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A Yes.

Q You state in the letter that -- in the first sentence -- "That I understand that you and I have agreed," and then you list the items to which you had agreed.

Previously I believe you said you had not discussed certain items, one of them being the windfall profits.

A I don't recall that I did.

Q Could you explain why you state in the letter that you and I have agreed, when you state you don't recall having previously discussed these items?

A Because I assumed that he and I would agree upon it, and we did, as I remember, on May 27th.

Q You did what on May 27th?

A Agreed on the windfall profits.

Q In other words, May 27th you and he agreed as to what you wrote in the letter, that should a sale -- should a consummated sale occur, that those would be the terms?

A Yes.

Q Do you recall what else occurred at this meeting on the 27th of May, if anything else occurred?

A I don't recall anything.

Q Whose idea was it to send the letter?

MR. RYAN: I don't think there is any testimony that the letter was sent. It was hand delivered.

MR. BELKIN: Okay.

Q How did Mr. Dumaine receive this letter?

A I handed it to him.

Q Whose idea was it to give this letter to Mr. Dumaine?

A Mine.

Q Why did you feel a letter was required?

A Because --

MR. RYAN: You mean, what was the purpose of the letter?

MR. BELKIN: Yes. Why you felt that there had to be a letter between the two of you?

A I thought it was useful to have an understanding on paper so that if negotiations should proceed further, that we understood each other at that point, particularly in regard to the payment of stock and the windfall profits.

Q Had you, Mr. Hutchins, and -- strike that.

Had you and Mr. Dumaine agreed to the sale of the railroad according to the terms of the letter of May 27th subject to the approval of your respective boards?

MR. RYAN: Will you repeat that question, please.

(Whereupon, the pending question was read back by the reporter.)

MR. RYAN: I think that question is almost impossible to answer, unless you know what you mean by agreed.

In other words, if you mean did Mr. Hutchins agreed and Mr. Dumaine agree as to what the terms were going to be, were going to be presented to the board is one thing.

THE WITNESS: That's right.

MR. RYAN: That would be one answer, and then you can talk about agreement as being some sort of legal obligation.

MR. BELKIN: Well, the first person to use the word agree is in the letter, and --

MR. RYAN: Yes, but the letter was written by a layman, not by a lawyer, and you are asking questions as a lawyer -- you know -- of a layman, and so I think you are going to get a confusion to -- on this subject.

Repeat the question, and I will let him answer it, but I think it's not going to be a responsive answer.

The agreement, as an agreement has legal connotation to it, and a layman it means one thing, and to a lawyer it means another.

BY MR. BELKIN:

Q What did you mean by you used when you used the word "agreed" Mr. Hutchins?

A That he and I had a meeting of the minds, that

should proceedings continue, that this would be the basis of them --

Q All right.

A (Continuing) -- as far as he and I were concerned.

Q If you can answer that question that I have asked, in light of your now definition of how you accept the word agreed, then I think the record would be clear, and if you can read that question back again, or I will reask it again rather than read it back.

Had you and Mr. Dumaine agreed to the sale of the railroad, according to the terms of the letter of May 27t subject to the approval of your respective boards?

A Subject to the approval of the respective boards, and subject to the approval of Bangor Punta management.

Q Now, did you go to the board after the letter or after this meeting of the minds immediately?

A No.

Q Why not?

A Because Bangor Punta management had questions about the transaction and felt that an arrangement more favorable to Bangor Punta might be negotiated, and wished to explore in depth the tax effect on Bangor Punta, particularly in respect to the comparable tax effect of sale of assets versus the sale of stock.

Q You said the Bangor Punta management had questions about this transaction or --

A Had reservations as to whether this transaction was in the best interest of Bangor Punta.

Q Being a transaction with Mr. Dumaine?

A Yes, the transaction as outlined in the letter of May 12th --

MR. STEWART: 27th.

THE WITNESS: 27th.

MR. RYAN: 27th.

Q Well, how were they made aware of the terms expressed in your letter of May 27th, the people on the board of directors?

MR. RYAN: What was the last part of that?

MR. BELKIN: The people on the board of directors the people --

THE WITNESS: The management.

MR. BELKIN: The management.

MR. RYAN: The management.

MR. BELKIN: Right.

A I think I communicated it by telephone initially to Mr. Robertson, and thereafter I don't remember to whom.

MR. RYAN: If you will [illegible]. Hutchins Exhibit No. 5, it indicates that a copy of it was sent to Mr. Flick, a copy of the letter.

Do you recall?

THE WITNESS: I would say it would be him.

MR. RYAN: In other words, I think you will find copies of that was sent to -- at least to Mr. Flick, if not others.

BY MR. BELKIN:

Q Do you recall what Mr. Roberton's response was to the letter?

A Mr. Robertson, I think, was in agreement with my letter covering the meeting of the minds, but told me that Mr. Salgo and Mr. Flick had the reservations about this being an advantageous arrangement for Bangor Punta, as I described earlier.

Q Did you speak with Mr. Salgo or Mr. Flick directly

A Yes -- well, I met with --

MR. RYAN: When?

Q (Continuing) With regard to any objections that they may have had?

A Yes. I met with them in New York on June 3rd.

[pp 32 - 33]

Q Do you recall speaking with Mr. Dumaine shortly after this letter of May 27th?

A I don't recall. I may well have. I don't recall.

Q In your last sentence in this letter you state:

"I will leave this letter with you with the thought in mind if I do not hear from you within the next day or two, that your understanding squares with mine."

Do you recall whether there was any communication shortly thereafter between yourself and Mr. Dumaine?

A I must have called him after the June 3rd meeting and told him that we could not give him firm confirmation of the deal, because we needed time to explore the tax matters.

I must have called him, yes.

Q Why did you -- was the letter signed that you --

A No.

Q Why did you deliver the letter to Mr. Dumaine unsigned?

A I sent a copy to Mr. Robertson the day before I went down, and he, I think, conferred with Mr. Flick, and they reminded me that I had no authority to confirm a deal, so I felt it better be in the form of an unsigned letter, which carries the weight of a memorandum, if you will.

Q And this is what Mr. Robertson came back to you --

A He came back to me with the admonition or the reminder that I did not have authority to make a binding deal.

Q Did he indicate he had talked with anyone to get this advice?

A Yes. I think he talked to Mr. Flick.

Q Did he tell you that or is this just --

A I don't recall.

Q Did you speak with Mr. Flick directly about this letter?

MR. RYAN: About what?

MR. BELKIN: About this letter, either sending it unsigned or sending it -- anything about this letter.

A No. If there was any communication, it was a transmittal letter sending it to him as a matter of information.

I did not have a conference or talk to him to my recollection. I am sure I didn't.

[pp. 39-41

ALC

544 A

165. [Proposed by Chris-Craft] Hutchins at his deposition by Chris-Craft testified concerning a meeting held on June 3, 1969 between Hutchins, Salgo, Wallace, Robertson and Flick as follows:

Q Did anybody report to you that a Mr. Wieler of Peat, Marwick had been consulted on or before May 29th, 1969, regarding the accounting treatment , at a loss of selling the railroad for $5 million?

A No.

Q Is today the first time you were aware of the fact that he had been consulted?

A Mr. Wieler?

Q Yes. As shown in this memo.

A No, today is not the first time.

Q When did you become aware that Mr. Wieler was consulted?

A At a meeting in New York, at the Bangor Punta offices on June 3rd, a discussion was had with the top management of Bangor Punta. Mr. Wallace, Mr. Robertson and myself, possibly Mr. Flick and Mr. Salgo, talked with Mr. Wieler.

Q Was he at the meeting, too?

A No, on the phone, on a conference call, and I heard Mr. Wieler's comments to that general effect as expressed in the exhibit,

Q What was the purpose of this meeting -- on what date did you say?

A June 3rd.

Q On June 3rd.

A I think the purpose of the meeting was to discuss the effect on Bangor Punta of the sale of the railroad for $5 million in cash.

Q You said --

A To Dumaine, the effects on Bangor Punta of the sale to Dumaine for $5 million in cash.

Q Had you reported to the management of Bangor Punta before June 3rd that you had not succeeded in improving the sale price with Mr. Dumaine?

A I must have, and it must have been by telephone, and I assume I summarized my conversations with him on June 3rd.

Q What was said concerning the situation?

A Whether Wieler's report that the loss involved, the book loss involved from $18 million odd down to $5 million would have to be shown as a loss on the income statement of Bangor Punta.

Q Did anybody express concern about that at the meeting?

A Yes.

Q Who?

A I think all three of the management people did.

Q By the three, you mean Messrs. Salgo, Wallace and Robertson?

A Yes.

Q Was there a discussion of whether different accounting techniques could be used to avoid showing such a loss?

A There was discussion as to whether a different effect would be had if assets were sold rather than stock and a determination made that an examination in depth should be made on the effect of selling assets rather than stock.

Q Selling the assets to Mr. Dumaine?

A Rather than selling him stock.

Q The assets for this price, rather than the stock for this price?

A Yes.

[pp. 63 ff.]

Revised 12/17/70 **547A**
[Adopted from SEC Finding No. 17]

ALC

167. [Proposed by Chris-Craft] The minutes of the August 28, 1969 meeting of the Amoskeag Board of Directors contain the following:

> "Board informed Bangor Punta is prepared to sell its investment in Bangor and Aroostook R.R. in September. After discussion and upon motion duly made and seconded, it was
>
> VOTED: to ratify, confirm and approve the action of the President in committing Company to purchase from Bangor Punta Corp. its investment in Bangor and Aroostook R.R. for $5,000,000 and to authorize him to take such action and to do such things as may be necessary or desirable in order to execute said purchase.
>
> (Mr. R. G. Stone took no part in aforementioned discussion and was recorded as not voting.)"

168. [Proposed by Chris-Craft] Mr. Hutchins testified at his examination by the SEC that on August 28, 1969 he met with John M. Coward in Boston. The meeting was suggested by Mr. Robertson (the then vice chairman of the Bangor Punta Board of Directors). Mr. Hutchins testified as follows at his examination by the SEC concerning the discussions with Mr. Coward:

Q Did he tell you anything of a substantive nature that Mr. Coward had stated in terms of what he might be offering?

A No, except that he was a man of substance and thought he wanted to buy the railroad, and as an alternative buyer, I should, as a matter of diligence, contact him, which I did.

Q When was the first contact with Mr. Coward?

A My only contact with Mr. Coward was on Thursday, August 28th.

Q I see. All right.

What occurred at that meeting?

A I met him at the State Street Bank in Boston, and he offered more money than Mr. Dumaine -- I don't remember how much, but it was substantially more money, and I asked him why he wanted to buy the railroad, and the reasons he gave me were so out of accordance with the facts that I concluded that in spite of what he said, the partners who were

engaged with him would, upon serious look at the situation, not want to do it.

He gave us a reason for wanting to buy it that Maine is a growth state and growth area, and he thought the Bangor & Aroostook area was a growth area.

I do know something about the area, and it's fairly opposite.

I said, in what way is it going to grow?

He said, all the copper mines up there -- we don't have any. People are exploring for minerals, but it's all over the western part of the state, and nothing has been found of any substance, and he feels that the Matrians Port situation that Occidental proposed down there would be helpful to the railroad; that was nowhere near our line, and he is uninformed about the territory, and I concluded any offer he might make on behalf of himself and other people associated with him wouldn't hold up, and therefore, the offer was not a substantive one.

Q Do you know who the other individuals were --

A No.

Q (Continuing) -- he was associated with?

A No.

Q Did you ask him?

A No.

MR. BELKIN: At this point I'd like to introduce into the record a letter dated September 18, 1969 to Mr. Curtis M. Hutchins from John M. Coward.

549A-2

(Whereupon, the above-referred to document was received and marked by the reporter as Hutchins' Exhibit 7 for identification, as of this date.)

BY MR. BELKIN:

Q Could you identify Exhibit No. 7, please, Mr. Hutchins? (Handing to witness.)

A Yes, I do.

Q Could you tell us what Exhibit No. 7 is?

A Exhibit No. 7 is a letter from Mr. Coward reiterating his interest in the railroad and making a specific offer of $10 million.

Q Does that offer, which is contained in the letter, was that what his offer contained in your August 28th meeting, or was there any changes?

A Substantially so. I don't recall they were exactly that. Substantially that.

Q Did you get this letter on the letterhead of a corporation, do you recall, because this apparently is a copy --

A Yes. [pp. 61-63]

Q Did you feel when Mr. Coward approached you that he couldn't finance the $10 million?

A No. I wasn't --

Q I am trying to understand your feelings as to your reaction to the $10 million.

A Well, I felt this way about it:

On his statement that he had other partners in it, presumably their examination of the railroad situation would cause them not to put up the money.

I don't disbelieve Mr. Coward's ability to get the money, as far as getting cash together is concerned.

A railroad earning point of $50,000 a year, or let's say a plump break even over the five-year period ahead, in any -- using any kind of business judgment would not pay $10 million for a railroad property, and I felt that his partners would come to that same conclusion.

It was hard for me to believe that somebody would

pay $10 million just for a hobby, and I felt, too, that -- this September -- the 15th was the date?

Q 18th.

A (Continuing) -- 18th date, we were pretty well along the line with Mr. Dumaine, and we had some discussions with him on this sale of stock or sale of assets, that we were morally committed to him, and I didn't want to do anything to disrupt that deal, because I felt he was a substantive buyer, and he had the $5 million, and he really wanted the railroad, and I felt that that sale could be accomplished, and I doubted whether this one could, and it was a business judgment, right or wrong, that I did not give Mr. Coward serious consideration and stuck with Mr. Dumaine, which is a business judgment.

Q Did you relate Mr. Coward's offer to any of the management of Danger Punta or any of the directors?

A I don't know that I did or not. I quite possibly or probably told Mr. Robertson about it.

Whether I related it to New York, I don't remember, because I didn't feel it of substance, solid substance enough to relay the price is 40 times earnings, what we earned last year.

People don't buy railroads at five times their earnings.

Q You mean that if price was a little lower than

$10 million but more than five, you may have been more seriously considering him?

A No, because Mr. Dumaine had a real reason for buying a railroad. He's a -- has a solid interest in the welfare of transportation in New England, particularly northern New England, and Mr. Dumaine hoped that his purchase of the Bangor & Aroostook Railroad might lead to merger in some way with the Maine Central, which he felt would be helpful from the transportation point of view, and thereafter he had vague hopes of including the Boston Maine and possibly the Delaware and Hudson, and making a northern New England system out of it, and that strategy or plan of his had some substance to it; more so than somebody buying the Bangor & Aroostook Railroad as a hobby or on the unsubstantive reasons that Mr. Coward gave me.

Q Well, wasn't Mr. Salgo and other management people, directors, weren't they interested in getting as much as they could for the railroad?

A Oh, yes. Yes.

Q Would -- did you feel that Mr. Coward's offer, in which he allowed you to hold stock of the railroad as collateral, and also put members on the board, provided enough protection for Bangor Punta?

A Yes. You have to take that letter in the content of our being pretty well down the road with Dumaine,

having agreed with him on a price, and I think an agreement in the Bangor & Aroostook management that we were committed to Dumaine to the extent that we -- if we could work out the proper tax arrangements, and the proper vehicle for giving him the railroad, that we were morally, at least about this time -- this is September 15th or 16th -- that we should pursue that course, and not clutter up the negotiations with Dumaine.

I felt there was a good possibility of our losing Dumaine, because he was getting restless while we were doing all our tax work.

Q At what point did you feel Bangor Punta was morally committed to Mr. Dumaine?

A I don't know, but I did at this point, which is mid-September.

Q What did you mean in the letter by, and I quote from the second paragraph -- from the second paragraph of the letter:

"At our meeting in Boston the 27th of August you indicated to me that you were in charge of any sale of the railroad that might take place, and that in fact you were considering an offer at that time and could not consider my offer until such time as the other offer expired."

Were you morally committed as of the 27th of August?

A I felt I was, yes.

Q Is that what you -- strike that.

In your words, what did you tell Mr. Coward in the meeting of August -- you say it's August 28, although he indicates it's August 27th.

A My diary shows the 28th.

Q Rather than use his words in the letter, I'd like to know what you told him, what you recall you told him?

A I told Mr. Coward that we were negotating with someone else, and the negotiations were reasonably well along, and I didn't feel at this point that I wanted to enter into negotiations with him as long as the other negotiations were pending, and I said that partly because I did not believe that his interest would prove to be a substantive one.

[pp. 66-70]

MR. BELKIN: I will take your suggestion up and ask Mr. Hutchins what he means by moral commitment.

THE WITNESS: Let's see what I do mean.

I had an understanding with Dumaine, as the record shows, and I had the feeling, I had the conviction that this arrangement with Mr. Dumaine was the best course of action for Bangor Punta to pursue, and I felt it my duty, as a director, to impress that upon the management and the board of directors.

In that sense I had a moral obligation to the project.

After listening to Mr. Coward, I was more convinced that the Dumaine sale was the best course for us to pursue, and I didn't want to endanger that.

BY MR. BELKIN:

Q Why did you feel after listening to Mr. Coward that the best course would be to sell it to Mr. Dumaine?

Did you have any specific feelings or reasons?

A It's hard to define a state of mind.

Having been convinced, I guess over a time, that this was the best course for us to pursue, I probably was a little more suspicious or critical or unbelieving of Mr. Coward's offer than I might otherwise have been.

What he told me hadn't -- did not convince me that the Dumaine course wasn't the best one.

Contrarywise, if I had been convinced that Mr. Coward's offer was substantive in any kind of diligence, I would have had to pursue it.

I just didn't think so, and that was just a matter of business judgment of mine, right or wrong.

Q Do you know whether anyone ever found out who he might have been representing?

MR. RYAN: Who Mr. Coward represents?

MR. BELKIN: Yes, Mr. Coward, excuse me.

Q Did anyone indicate that to you?

A No, except that I understood, and I can't remember where, Mr. Coward represented money in the Coward family, which resulted from the sale of Coward Shoe Company to one of the holding companies, and that there was money in the family, and that he had other associates in this pool with him. That's about all I ever found out.

Q Do you know whether between January, 1969 and August '69 Mr. Coward was in contact with any specific individuals of Bangor Punta?

A Only to the extent that he was in contact with somebody in New York, and whether it was Robertson, Wallace or Salgo, I don't know, which prompted a call from Robertson to me suggesting I ought to see him.

When contact from Coward to Bangor Punta took place, I don't know.

549A-9

Q I would mean, other than the time in this phone call, I imagine, in late August, other than that time, are you aware of any?

A No, other than that sequence, I am not aware.

Q Why did you have Mr. Coward come to Boston to tell him that you basically couldn't consider his offer?

A Again, a matter of diligence, Mr. Robertson... suggested that I see Mr. Coward and listen to him.

Mr. Coward was in Nantucket, and I was in Bangor, so, Boston seemed to be a convenient meeting place, and I think it was then my duty to at least see him and see what he had to say.

I repeat, what he had to say didn't convince me of a substantive interest.

I repeat, I could see no reason why he would want to buy the railroad really.

Now, why sophisticated associates, which presumably would go along with the thing, I don't know, and I could see why Mr. Dumaine wanted to buy it.

When anybody sells anything of magnitude or buys something of magnitude, one always tries to find out the reason behind it, strategy behind it. [pp. 92-95]

549 A-10

A letter from Mr. Coward to Mr. Hutchins dated September 18, 1969 stated as follows:

September 18, 1969

Mr. Curtis M. Hutchins
Bangor Punta Corporation
405 Park Avenue
New York, New York 10022

Dear Mr. Hutchins:

I thought it would behoove me to write to you at this time to assure you of my group's continued interest in acquiring all, or substantially all of the stock of the Bangor and Aroostook Railroad and to review our offer to Bangor Punta Corporation.

At our meeting in Boston the 27th of August, you indicated to me that you were in charge of any sale of the railroad that might take place and that, in fact, you were considering an offer at that time and could not consider my offer until such time as the other offer expired. My recollection is that you would know one way or the other by the end of September.

In brief our offer still stands. We would pay $4,000,000.00 at the closing and $1,000,000.00 per year, each year for six years, making the total price $10,000,000.00. Bangor Punta would hold the stock as collateral on the loan and collect interest at the prime rate. We would also expect that Bangor Punta would have representation from time to time on the Board of Directors in proportion to the amount of the outstanding loan to the total purchase price. All the above would naturally be subject to a discreet review of the assets and liabilities of the company.

I don't want to wish our adversary any ill will, but, on the other hand, I hope our group can be successful.

Respectfully yours,

John M. Coward

John M. Coward
President

cc: Mr. Nicholas Salgo
Mr. W. Cordon Robertson

New 12/13/70
[Adopted from SEC Finding No. 19]

550 A

169. [Proposed by Chris-Craft] The minutes of the September 9, 1969 meeting of Bangor Punta's Board of Directors contain the following concerning the Railroad:

DISPOSITION OF BANGOR AND AROOSTOOK RAILROAD

Discussions regarding the sale of the Bangor and Aroostook Railroad, which has been under consideration by the Board of Directors for a considerable period of time, were resumed. Various proposals concerning the sale of the Railroad were discussed, including the sale of assets, a combination of a partial sale of the assets and a leasing arrangement of the remaining assets, and the sale of the stock of the Railroad.

In the course of discussing whether stock or assets could be sold, the tax aspects of such sales were fully considered as well as the sizeable diminution of assets on the books of the Corporation as the result of one type of sale as contrasted with the other. Also considered were indications that the prospects for increased earnings by the Railroad for Fiscal Year 1970 and in future years are very poor. Additionally, Mr. W. Jerome Strout, President of the Railroad, had previously informed the Board that substantial expenditures of money would be necessary for capital items during the next several years. Mr. Hutchins stated that this would constitute a heavy burden on the parent company at times when required loan capital will not be available to the Railroad. Further, the Board had also been advised that competition by other modes of transportation indicate that the possibility of expanding the business of the Railroad is negligible (Reference: BPC-5-21-69-8.)

After due consideration, the Board of Directors decided that it should authorize Mr. Curtis M. Hutchins, a member of the Board who has been negotiating with Mr. F. C. Dumaine, Jr., President of Amoskeag Company, to consummate the prompt sale of the Bangor and Aroostook Railroad for a consideration of Five Million Dollars ($5,000,000) or more in cash and such other additional consideration and benefits to the Corporation as are obtainable under terms and conditions which, in Mr. Hutchins' judgment, would be in the best interests of the Corporation.

551 A

Upon motion duly made, seconded and carried, it was

RESOLVED, that Mr. Curtis M. Hutchins, a member of the Board of Directors of this Corporation, be, and he hereby is, authorized to consummate the sale of either the assets or stock of the Bangor and Aroostook Railroad to Amoskeag Company, or to such other buyer, for a consideration of Five Million Dollars ($5,000,000) or more in cash and such other additional consideration and benefits for the Corporation as are obtainable under terms and conditions, as will, in his judgment, be in the best interests of this Corporation; and

RESOLVED, that Mr. Curtis M. Hutchins and the officers of this Corporation be, and they hereby are, authorized to execute contracts and other documents, and take all other action necessary to consummate the sale of the Bangor and Aroostook Railroad in accordance with the terms and conditions so negotiated.

New 12/13/70
[Adopted from SEC Finding No. 20]

552 A

ALL

170. [Proposed by Chris-Craft] The minutes of the September 22, 1969 meeting of the Board of Directors of Bangor Punta Operations, Inc., a wholly-owned subsidiary of Bangor Punta, contain the following concerning the Railroad:

SALE OF STOCK IN BANGOR
AND AROOSTOOK RAILROAD COMPANY

The Chairman stated that it had been determined that it would be in the best interests of the Corporation to sell the shares of the Bangor and Aroostook Railroad Company owned by it.

After discussion, and upon motion duly made, seconded and carried, it was:

RESOLVED, that the proposed sale by the Corporation of 177,466 shares of the issued and outstanding capital stock of Bangor and Aroostook Railroad Company, a Maine corporation, for $5 million in cash will be in the best interests of the Corporation and its sole stockholder and Amoskeag Company.

FURTHER RESOLVED, that the proper officers of the Corporation be, and each hereby is, authorized to execute an agreement of sale subject to the terms and conditions as such officer in his sole discretion with the advice of counsel may determine and any amendments, modifications and supplements thereto.

FURTHER RESOLVED, that all actions and doings of the officers, employees and agents of the Corporation or any of them in connection with the proposed sale by the Corporation of said capital stock of Bangor and Aroostook Railroad Company to Amoskeag Company be, and they hereby are approved, ratified and confirmed.

All

171. [Proposed by Chris-Craft] On October 2, 1969 Bangor Punta Operations, Inc. ("Operations"), the subsidiary of Bangor Punta Corporation which held the stock of the Railroad, entered into an agreement with Amoskeag Company which provided, among other things, that:

> "Operations will on the Closing Date (hereinafter defined) [October 2, 1969] sell to you or your nominee 177,466 shares (the "Stock") of the capital stock of Bangor and Aroostook Railroad Company, a Maine corporation. The total purchase price to be paid by Amoskeag to Operations is $5,000,000 payable by certified or cashier's check."

By supplemental agreement entered into on October 2, 1969, it was

> ". . . further agreed that if prior to October 2, 1972, BAR [Bangor & Aroostook] shall transfer, sell, or otherwise dispose of all or substantially all of its assets, except in a transaction in which neither gain nor loss is recognized for federal income taxes, Amoskeag shall pay to Operations one million five hundred thousand dollars ($1,500,000) within 30 days after the said transfer, sale, or other disposition."

By further supplemental agreement entered into on October 2, 1969, it was

> ". . . further agreed that Amoskeag will cause BAR to pay to Operations the net profits received by BAR or its assigns from the sale of all or any part of Sears Island prior to October 2, 1974, less any costs or charges related to such sale. Operations shall have the right to veto any sale for less than one million dollars ($1,000,000)."

172 554A

[Proposed by Chris-Craft] On October 3, 1969, Bangor Punta issued the following press release:

NEWS

BANGOR PUNTA
ONE GREENWICH PLAZA, GREENWICH, CONN. 06830
(203) 661-3900 (212) 792-8002
CONTACT: DeWitt C. (Dick) Morrill

FOR IMMEDIATE RELEASE

SEC Exhibit D
10/22/70 H

BANGOR AND AROOSTOOK RAILROAD ACQUISITION

BOSTON, MASS. -- October 3, 1969 -- Bangor Punta has sold its stock in the Bangor and Aroostook Railroad to The Amoskeag Company for $5 million in cash.

Frederic C. Dumaine, Jr., president of Amoskeag, said that no operating changes or changes in management of the road are contemplated and that W. Jerome Strout will remain president and chief executive officer.

The Bangor and Aroostook Railroad stock is carried at approximately $18 million on the books of Bangor Punta Corporation. The sale to Amoskeag will result in a non-recurring book loss of approximately $13 million, with no tax benefit to the company, while part of the $5 million to be received will be subject to capital gains taxes.

David W. Wallace, president of Bangor Punta, said continued operation of the railroad does not fit in with the company's growth program.

The 78-year old railroad, which principally serves agricultural and forest industries in northern Maine, has been a subsidiary of Bangor Punta Corporation since the merger of Punta Alegre Sugar Corporation with Bangor & Aroostook Corporation in 1964.

ALL

173. [Proposed by Chris-Craft] A draft press release prepared by the Railroad, was revised by Bangor Punta to read, in part, as follows:

> "Boston, Mass., October 2, 1969--Amoskeag and Bangor Punta have signed an agreement calling for Amoskeag to purchase the Bangor Arostook [sic] Railroad for 4,000,000 in cash and assumption of the Railroad liabilities.
>
> * * *
>
> The Bangor & Arostook [sic] Railroad is carried at approximately $18 mil. on the books of Bangor Punta Corporation. The sale of the Railroad assets will result in a loss for tax purposes in a somewhat lower amount than the $14 mil. book loss of Bangor Punta."

This release was not issued since the stock rather than the assets was sold.

175. [Proposed by Chris-Craft] Prior to the issuance of the final prospectus, First Boston and its attorneys had examined the minutes of Bangor Punta's Board of Directors referred to in Findings 155 and 161, but did not see the May 27, 1969 document referred to in Finding 164, and did not see any of the Amoskeag minutes or speak to any representatives of Amoskeag. The Piper defendants and their attorneys did not see any of the documents described in Findings 155, 159, 160, 161, 164, 167, 169, 170 or 173.

176. : [Proposed by Chris-Craft] Bangor Punta incurred a $13.8 million book loss on the sale of its investment in the Railroad.

177. [Proposed by Chris-Craft] At the end of fiscal 1968, Bangor Punta had Retained Earnings of $37.9 million and the book loss incurred due to the sale of the Railroad was equivalent to 36.5 percent of such Retained Earnings. At the end of fiscal 1969, after taking into consideration all the non-recurring extraordinary items including the book loss on the sale of the Railroad, Bangor Punta's Retained Earnings were $20.5 million.

178. [Proposed by Chris-Craft] At the end of fiscal 1968, the Shareholders' Equity in Bangor Punta was $113.5 million and the book loss incurred due to the sale of the Railroad was equivalent to 12 percent of the Shareholders' Equity at the end of fiscal 1968. At the end of fiscal 1969 after taking int[illegible]ration all the non-recurring extraordinary items incluc[illegible]g the book loss incurred on the sale of the Railroad, the Bangor Punta Shareholders' Equity was $133 million.

DLC

179. [Proposed by Chris-Craft] Bangor Punta's consolidated net income for the period commencing with the fiscal year ended September 30, 1964 through the fiscal year ended September 30, 1969, was:

1964	$3,749,000
1965	5,578,000
1966	5,569,000
1967	5,571,000
1968	8,101,000
Six months ended March 31, 1969 (unaudited)	5,032,000
1969	(8,566,964)

In fiscal 1969, Bangor Punta's consolidated net income, before non-recurring extraordinary items including the book loss incurred due to the sale of the Railroad, was $5,985,067.

179A. [BP] (a) At various times over the past several years, Bangor Punta had considered disposing of part or all of its BAR interests. In 1963 and 1964 the BAR was considering entering into a sale and leaseback transaction or other combination with the Maine Central Railroad.

Again in 1965, the sale and leaseback type of transaction was reconsidered. In 1967, discussions with the Maine Central were resumed. In 1968, discussions between Bangor Punta and the Boston and Maine Railroad and with the Delaware and Hudson Railroad concerning a combination with the BAR took place. Annexed hereto are copies of newspaper clippings and published stock market reports concerning the foregoing.

(b) Because (a) the BAR's earnings had been declining for several years; (b) the future earnings contribution by the BAR to Bangor Punta was, in the opinion of management, doubtful, and (c) all efforts to merge or otherwise combine the BAR with another railroad had proven unproductive, in late March, 1969, Bangor Punta management gave renewed consideration to the possibility of disposing of the BAR. Specifically, consideration was given to a distribution in stages of part or all of the BAR shares to Bangor Punta shareholders. This management proposal is outlined on the ~~annexed~~ memorandum of Mr. Reames submitted as Exhibit 1/

(c) Between 1964 and 1968, the Bangor Punta equity in the BAR's pre-tax earnings as reported in the financial statements contained at page 9 of the Bangor Punta final prospectus were as follows:

Fiscal Year	Earnings
1964	$1,140,000
1965	$1,634,000
1966	$ 912,000
1967	$ 374,000
1968	$ 59,000

(d) (Proposed by Chris-Craft and the SEC) The following is a portion of footnote F to the portion of the financial statements quoted in "C" above appearing at page 21 of the Bangor Punta final prospectus:

> "The high level of shipments attributable principally to Maine's widely marketed potato crop in 1965 resulted in a substantial increase in the Railroad's earnings and profit margin for that year. Since 1966 depreciation, interest charges and other costs associated with substantial additions to the Railroad's operating properties and wage increases and related payroll expenses, together with a slowdown in potato shipments, are responsible for decreasing earnings. See the Consolidated Statement of Income of Bangor and Aroostook Railroad Company and Subsidiaries included elsewhere herein."

(e) In fiscal year ended September 30, 1969, Bangor Punta reported in its financial statement issued in December, 1969 that its equity in the BAR's pre-tax loss for the year was $18,207.

NEW YORK TIMES
Wednesday, Feb. 14, 1968

D. & H. CO. SOUGHT BY BANGOR PUNTA

Conglomerate Company in a Bid to Acquire Holding Concern of the Railroad

By ROBERT E. BEDINGFIELD

The Bangor Punta Corporation, one of the most aggressive conglomerate companies, intends to acquire the Delaware & Hudson Company, the holding company that owns all the stock of the 734-mile Delaware & Hudson Railroad.

The D. & H. is one of the most profitable railroads in the Northeast. Bangor Punta's interst in the venture, however, is not in the railroad but in the corporate structure of the parent, the Delaware & Hudson Company. Plans of Bangor Punta provide for putting the railroad's stock in a voting trust.

Stockholders of the Delaware & Hudson Company at their annual meeting on April 24 will be asked to approve a merger into the conglomerate concern. At the same meeting, they will be asked to approve the inclusion of the railroad in the Norfolk & Western Railway. Last month, the United States Supreme Court held that the N. & W. must offer to acquire the Delaware & Hudson Railroad, as directed by the Inter-States Commerce Commission last year.

Terms Outlined

Under terms of the agreement, approved yesterday by directors of both Bangor Punta and Delaware & Hudson, each share of D. & H. common stock would be exchanged for eight-tenths of a share of a new Bangor Punta $2 convertible preference stock and $7.50 of common stock. The two would have a combined estimated market value of $47.50. D. & H. closed yesterday at $39.75, up $1; Bangor Punta common closed at $46, off 6½ cents.

In a joint announcement, Nicolas M. Salgo, chairman of Bangor Punta, and Frederic C. Dumaine Jr., president and chief executive officer of the Delaware & Hudson Company, said the sale of the holding company to the conglomerate company would be effected whether or not the inclusion of the D. & H. Railroad in the Norfolk & Western was approved by the D. & H. stockholders.

Yesterday, however, the D. & H. in a separate announcement said that its board of managers would recommend favorable action by stockholders on the inclusion of the road in the N. & W. on terms recommended by the Interstate Commerce Commission.

Those terms give the N. & W. the option of acquiring the assets of the D. & H. for either $41.2-million, or 422,151 N. & W. shares, in addition to $1-million of five-year 6 per cent notes. D. & H. would retain $20.7-million of its excess working capital. Until now, the Norfolk & Western has not announced which option it will exercise. It is understood that N. & W. has indicated it would prefer to issue N. & W. stock instead of paying cash.

Once Bangor Punta is in control of the D. & H., it is expected that it will try to work out the inclusion of the Bangor & Aroostook Railroad, the Boston & Maine Railroad and the Maine Central Railroad in the N. & W. system. Bangor Punta now owns the Bangor & Aroostook, which operates 563 miles of railroad in Maine.

The I.C.C has ordered the Norfolk & Western to take over the Boston & Maine on the basis of one-tenth of a share of a new N. & W. preferred stock for each share of B. & M. Richard Mulhern, president of the B. & M., said in a telephone interview yesterday that his management found the suggested take-over terms unacceptable.

Mr. Mulhern disclosed that the B. & M. jointly with the D. & H. has completed studies that show that "substantial savings could be achieved if we put the two properties [the Boston & Maine and the Delaware & Hudson] together." The B. & M. president said that, notwithstanding the agreement worked out by the D. & H. with Bangor Punta, "it is not our intention to abandon our position."

Bangor announced yesterday revenues of $50,548,000 for its first fiscal quarter ended Dec. 31, 1967. Revenues in the corresponding quarter a year earlier were $36,795,000. Net income in the latest quarter was $1,404,000, or 69 cents a share, compared with $1,242,000, or 68 cents a share, in the year earlier period. The company noted that a 10 per cent increase in the average number of shares outstanding had reduced the gain in share earnings.

Bangor Punta To Buy D&H Co. For $75,470,000

Transaction to Include Stock Package of New Preferred And a Fraction of Common

Holder Approval Is Needed

By a WALL STREET JOURNAL *Staff Reporter*

NEW YORK - Bangor Punta Corp. said it plans to acquire the Delaware & Hudson Co. with stock valued at about $75,470,000.

Directors of both companies, meeting separately, agreed in principle to the terms yesterday. It was announced by Nicolas M. Salgo, Bangor's chairman, and F. C. Dumaine Jr., D&H chairman.

Each D&H common share would be exchanged for 0.8 share of a new Bangor $2 convertible preference stock with an estimated market value of $50 a share and $7.50 worth of Bangor common. The fraction of Bangor stock to be received would be determined on the basis of its market value during a certain period, it is understood. But the two companies estimated the total package would have a market value of $47.50 a share.

D&H common closed on the New York Stock Exchange yesterday at $39.75 a share, up $1 a share. Bangor's common closed at $46 a share, off 62½ cents.

The agreement would be made into a formal contract, subject to the approval of shareholders of both companies. A favorable tax ruling would also be necessary as well as authorization from regulatory agencies.

Bangor Punta, headquartered in New York, produces textiles, pleasure boats and law enforcement equipment. It is also in agricultural ventures and operates the Bangor & Aroostook Railroad, based in Bangor, Maine, and primarily known as rail hauler of potatoes and wood products. D&H is the parent of the Delaware & Hudson Railroad, which operates over 734 miles of track from Montreal to Wilkes-Barre, Pa.

The Bangor-D&H announcement was something of a surprise in railroad circles, but it isn't expected to change Eastern railroad merger developments.

The joint announcement yesterday said that the sale of the D&H road to the Norfolk & Western Railway "is being recommended to stockholders of the Delaware & Hudson Co. by its board." The D&H, in a separate statement yesterday, said its board would recommend that its stockholders approve the terms of inclusion into the N&W at their annual meeting April 24.

A D&H spokesman yesterday wouldn't comment on whether the board's vote for recommendation was unanimous. The board has met on the question about three times in recent weeks. Mr. Dumaine last summer said he thought the D&H wasn't getting enough from the N&W under the terms ordered by the Interstate Commerce Commission last June and upheld by the Supreme Court Jan. 29. The N&W also has been opposed to the terms.

Mr. Dumaine directly and indirectly is the largest single holder of D&H common, but his holdings don't represent control. He has indicated in the past he might prefer that the D&H road go into a new New England system that would include the Maine Central, Bangor & Aroostook and Boston & Maine railroads.

Mr. Dumaine is president and main owner of Amoskeag Co., a Boston investment company that owns about 193,000 of D&H's 1,358,817 common shares. Amoskeag also owns 26.02% of Maine Central's common, which is held by an outside voting trustee. In addition, Amoskeag has 106,180 shares of Bangor Punta preference stock and 2,600 shares of Bangor common.

Under terms fixed by the ICC, the N&W would either pay the D&H about $41.2 million in cash or exchange 422,151 N&W common shares for the D&H railroad assets. Based on the close of N&W common yesterday, the N&W shares involved would be valued at $37,762,514. The cash transaction would involve a tax benefit to the D&H, a company source previously reported.

The ICC has also ruled that the D&H parent company could keep $20,686,234 in working capital when the transaction with the N&W was completed.

Bangor and D&H jointly stated yesterday: "Disposition of the (D&H) railroad would make additional cash available to Bangor Punta for expansion and acquisition purposes."

The two companies also stated that the sale of the D&H to Bangor Punta has been agreed upon "whether or not inclusion of the D&H railroad in the N&W system is approved by D&H stockholders."

The Bangor Punta board's action on the D&H agreement followed by a few hours Bangor's annual stockholder meeting. Bangor holders approved the issuance of up to 180,761 shares of the company's stock to acquire the remaining shares of Starcraft Corp.

Starcraft is in Goshen, Ind., producer of pleasure boats. Bangor, which owns 73% of Starcraft's 840,640 outstanding shares, on Feb. 1 announced a tender offer to acquire the balance of Starcraft's shares at about $32 in average market value of Bangor common or $29 in cash. The offer ends Feb. 26 unless extended.

For its first fiscal quarter, ended Dec. 31, Bangor Punta's net income rose to $1,401,000, or 69 cents a share, from $1,242,000, or 68 cents a share, a year earlier. Sales and revenue advanced to $50,518,000 from $36,735,000.

D&H's net income in 1967 declined to $2,576,461, or $1.62 a share, from $5,104,440, or $3.21 a share, in 1966. Its operating revenue decreased to $14,385,841 from $45,105,287 in 1966.

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angor Punta Corp., which pro-
s textiles and pleasure boats and
operates the Bangor & Aroostook
road, announced plans to acquire
Delaware & Hudson Co. with stock
ued at $75,470,000. D&H is the par-
company of the Delaware & Hud-
Railroad, which operates from
ntreal to Wilkes-Barre, Pa.

• • •

Bangor Punta Hints Plan to Join Its Line With 2 Others to Form New England System

By JOHN D. WILLIAMS
Staff Reporter of THE WALL STREET JOURNAL

NEW YORK—A Bangor Punta Corp. official expects the company's planned purchase of Delaware & Hudson Co. to offer a "constructive" solution to a dangling Eastern railroad problem.

Nicolas M. Salgo, Bangor Punta's chairman, said in an interview that the buying of the D&H, parent of the Delaware & Hudson Railroad, is just the first step in a plan to solve a problem as well as take Bangor Punta out of the railroad business.

Bangor Punta owns the Bangor & Aroostook Railroad—carried on Bangor's books at a value of about $18 million—which hasn't been included in any specific Eastern railroad merger plans. Mr. Salgo hinted that he is considering negotiations soon with principals of the Boston & Maine and the Maine Central railroads to join the carriers with the Bangor & Aroostook into a single New England rail package.

He believes that Bangor Punta officials, as "corporate managers" rather than long-standing railroaders, can come up with an "attractive" package acceptable to the various railroads. Bangor Punta, he indicated has no long-range intention of staying in railroading, preferring continued diversification through new corporate acquisitions.

Bangor Punta makes textiles, law enforcement equipment and pleasure boats; and operates agricultural properties as well as its railroad.

Mr. Salgo believes that either the Norfolk & Western Railway or the newly merged Pennsylvania New York Central Transportation Co. would be interested in a New England rail package. Or the new package could be jointly owned by the N&W and Penn Central, he believes. "You take the whole and use imaginative thinking and you can come up with something attractive to a lot of people," he said.

Vote Set on April 24

Bangor Punta and D&H shareholders are expected to vote on Bangor's purchase of the D&H on April 24. Under the terms, D&H holders would receive a Bangor Punta package of securities valued at $47.50 a share for each share of D&H common.

The amount of Bangor Punta preference and common shares—involved in the exchange—would be based on the market price of Bangor Punta common during a 15-trading-day period, which would follow by two weeks the action of the shareholders meetings April 24, it has been learned from D&H and Bangor Punta officials.

D&H holders on April 24 also will vote on the inclusion of their railroad into the Norfolk & Western. Under terms ordered by the Interstate Commerce Commission, the N&W would either pay the D&H $41,211,000 in cash or exchange 422,151 N&W common shares for the D&H railroad assets. The Delaware & Hudson Co. also would be allowed to keep $20,686,234 in working capital.

Thus, Bangor Punta would receive about $62 million in liquid D&H assets for about $75,-[illegible]00 in Bangor Punta securities. Bangor Punta plans to use the proceeds for further railroad acquisitions.

Mr. Salgo believes that the N&W, as the expected new owner of the D&H railroad, might consider the advantages of acquiring the New England carriers if they were offered as a package under favorable terms. The Bangor & Aroostook connects with the Maine Central, which, in turn, connects with the Boston & Maine, which connects with the D&H.

Boston & Maine Proposal

The ICC has ordered the inclusion of the Boston & Maine into the Norfolk & Western but B&M management dislikes the terms and B&M shareholders haven't voted on the matter. Mr. Salgo believes he can negotiate with the California and New York investment house executives who control key blocks of B&M shares on his idea for a New England system. He said these men, as he, are investors not railroaders.

Mr. Salgo contends that present New England roads can't stand alone, and separately, in the face of the new larger Eastern railroads formed in recent years. So he would hopefully join them, sell them and get out of the railroad business. "We are not railroad specialists," he said referring to Bangor Punta's management.

F. C. Dumaine Jr., chairman of the D&H favors the sale to Bangor Punta, which the board voted upon Tuesday, it is understood. But Mr. Dumaine didn't vote on the plan to avoid any conflict of interest challenge. Mr. Dumaine, his family and Amoskeag Co., the Boston investment company he heads, own nearly 200,000 shares of D&H common. In addition, Amoskeag owns 26.3% of Maine Central's common—held by a trustee—and 108,780 shares of Bangor Punta securities.

Mr. Dumaine, reflecting a minority opinion on the D&H board, has said the D&H isn't getting enough for its assets from the N&W under the ICC-imposed terms. For many years he has favored forming a New England system including the D&H. Mr. Salgo doesn't believe the lines have to be drawn so sharply. "We are a common denominator of thinking," he said yesterday.

He sees the D&H going into the N&W, as long planned. But he would create the New England system and offer it to the N&W or the Penn Central.

Bangor Punta advanced 3⅛ to 49⅛ in the conglomerate-company sector after announcing plans to acquire Delaware & Hudson, which rose ¼ to 40. Teledyne, second most active on 161,600 shares, closed at 108 up 5.

Bangor Punta Corp. expects its proposed purchase of Delaware & Hudson Co. to offer a "constructive" solution to a dangling Eastern railroad problem. Bangor Punta owns the Bangor & Aroostook Railroad. Nicolas M. Salgo, Bangor Punta chairman, hinted he intends to start negotiations soon with the Boston & Maine and Maine Central railroads on a plan to combine with Bangor & Aroostook, creating a single New England road.

THE NEW YORK TIMES
Saturday, March 2, 1968

"Business and Finance"

Bangor Withdraws Offer for D.&H. Co.

By ROBERT E. BEDINGFIELD

The Bangor Punta Corporation, a conglomerate concern whose interests include consumer goods, textiles and the processing equipment and railroad fields, yesterday withdrew an offer it made on Feb. 13 for the Delaware & Hudson Company, parent of the Delaware & Hudson Railroad.

Bangor Punta's stock closed yesterday on the New York Stock Exchange at $39.125, off $1 a share. Delaware & Hudson closed at $36.25, also down $1. When Bangor first made its offer to D. & H., Bangor's stock was selling at $46 and D. & H. was selling at $39.75.

Under Bangor's offer, it would have exchanged eight-tenths of a share of a new $2 convertible preference stock and $7.50 of common stock for each share of D. & H. There are now 1,588,000 shares of D. & H. stock outstanding.

It was the plan of Bangor Punta to retain the D. & H. Company but to dispose of the railroad. It would have proceeded with the inclusion of the railroad in the Norfolk & Western Railway System under a directive issued by the Interstate Commerce Commission last year.

The N. & W. was ordered by the I. C. C. to acquire the D. & H. for either $41.2-million, or 422,151 N. & W. shares, in addition to $1-million of five-year 6 per cent notes. The N. & W. has elected to offer the stock rather than cash for D. & H.

After withdrawing the original offer to Bangor yesterday, the holding company made a revised proposal but this was immediately rejected by representatives of D. & H.

David Wallace, president of Bangor Punta, in an interview yesterday said that one of the principal reasons for his company's terminating the offer was its inability to get a satisfactory guarantee in the proposed contract between D. & H. and Bangor for inclusion of D. & H. in the Norfolk & Western. Other reasons for Bangor's change of heart, Mr. Wallace said, included the recent drop in the market price of N. & W. shares as well as of Bangor's stock and also the generally uncertain market conditions currently prevailing.

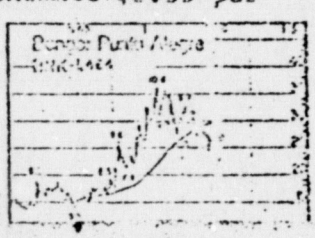
Frederic C. Dumaine Jr., chairman and largest single stockholder of the D. & H., could not be reached for comment yesterday. Mr. Dumaine has long had misgivings about the D. & H. going into the N. & W. He has maintained that the stock of D. & H. should be accorded far more favorable treatment in a merger than the terms set forth by the I. C. C. Stockholders of the D. & H. will vote on the inclusion proposal at their annual meeting on May 22.

-- THE "MAJOR FIVE" REVISITED --

Until the Bear Market signal of last March, this service had selected five stocks in which advised readers they could commit a major portion of funds. The Five were: 1) Bangor Punta 2) Burroughs, 3) Chicago & North Western RR, 4) Colt Industries, 5) Texas Instruments. Updated charts of these five stocks appear below. We have been in this business for 47 years and the policy we have developed is this; when the stock market climate becomes unhealthy, preservation of resources takes precedence over chances and hopes for capital gains, hence we open an active liquidation program upon the advent of the bear signal. This has proceeded to the point where our commitments in the five stocks mentioned is now only a token of what it was and is confined to Bangor Punta and Chicago & North Western Railroad. We are completely sold out of Colt, Burroughs and Texas Instruments. After completing our selling, the stocks we retain not only cost us nothing, but we have stashed away some pretty fancy capital gains. Very brief comments follow about the five stocks:

(1) Bangor Punta Corp. NYSE: BNK With BNK selling around 25 and estimated earnings of $4+, we are not too worried about continued holding of this stock. BNK is not in the sugar business any more, and the company soon will change its name, eliminating the word "sugar." Bangor disposed of its C-G-F grain storage elevator at Topeka, Kansas and thereby eliminated a contingent liability, for which it took some cash and paper in return. There have been negotiations to sell its railroad, Bangor & Aroostook, to the Maine Central. Someday this transaction likely will be made. Other operating divisions of the company are operating profitably, and we expect earnings to continue to show satisfactory and significant increases right along. However, the day is near when full tax charges must be set aside which will tend to temporarily cut earnings after taxes down into the area of $3 to $3.50 per share. This also was the approximate earnings pattern of Textron, in whose footsteps BNK seems to follow amazingly well.

(2) Burroughs Corp.- Were it not for the bear market signal, we would not have advised selling any BGH because our earnings projections indicate it could very well reach into the area of $5 plus per year. Someday we feel that BGH should sell at the equivalent of $150 per share. Bearing out our earnings estimates, BGH reported its 2nd 1966 quarter earnings of $6.4 mym were 107% above the same period the year before. Chairman Ray Eppert said it appears 1966 net income from operations (excluding non-recurring profits) should approximate $3.35 per share vs. $2.37 in '65. BGH is a stock which traditionally sells on a 25 to 35 times earnings basis. Its present price of 82 represents 24½ X its estimated 1966 earnings. For awhile, at least, in view of the uncertain long-term view, it is our opinion that BGH is selling high enough. Price/earnings ratios are falling and, despite its bright outlook, there is many a slip betwixt the cup and the lip.



THE WALL STREET JOURNAL
Monday, March 4, 1968

Bangor Punta Ends Negotiations To Acquire D&H

Market Conditions, Lack of Assurances for Inclusion Of D&H in N&W Cited

D&H Rejects Revised Offer

By a WALL STREET JOURNAL *Staff Reporter*

NEW YORK—Bangor Punta Corp. withdrew from negotiations to acquire Delaware & Hudson Co.

David W. Wallace, Bangor's president, said general stock market conditions and the "inability to negotiate formal assurances in the (Bangor-D&H) contract for the inclusion of the Delaware & Hudson Railroad in the Norfolk & Western Railway system" were reasons for the withdrawal. Delaware & Hudson Co. owns the D&H railroad.

Informed industry sources said that Bangor Punta made a revised offer Friday that was rejected by the D&H.

"The whole matter is closed," Mr. Wallace said, "and Bangor Punta is going ahead with current plans for other acquisitions." Bangor Punta owns the Bangor & Aroostook Railroad, produces a variety of products from textiles to pleasure boats and operates agricultural properties.

F. C. Dumaine Jr., chairman of D&H, said: "I brought the deal in originally and thought it was a pretty good one for both Bangor Punta and the D&H." He said he had considered it a more favorable transaction than the inclusion of the D&H in the Norfolk & Western. In June the Interstate Commerce Commission ordered that the N&W acquire the D&H and set the terms D&H shareholders will vote on May 22. Mr. Dumaine has said many times he prefers that the D&H become part of a possible new New England rail system, but D&H directors prefer that it be included in the Norfolk & Western system.

Mr. Dumaine wasn't present in the face-to-face negotiations between Bangor Punta and D&H principals in New York Friday. But he said he had heard that Bangor wanted to negotiate some parts of the proposal.

Under the original plan, announced a few weeks ago, Bangor Punta would have issued 0.8 share of a new $2 convertible preference stock with an estimated market value of $50 a share and $7.50 of Bangor common for each D&H common share. Both Bangor and D&H had estimated the market value of the package at $47.59 a share. The actual amount of Bangor preference and common stock that would have been exchanged was to have been based on a specific 15-trading-day period.

D&H common closed on the New York Stock Exchange Friday at $36.25, off $1 for the day; Norfolk & Western common closed at $89.625, off 12½ cents, and Bangor Punta closed at $39.125, off $1. Under ICC ordered terms the N&W would either pay the D&H about $41.2 million in cash, or exchange 422,151 N&W common shares and issue a $1 million, 5-year, 6% note for the D&H railroad assets.

"What's News"

Bangor Punta Corp. withdrew from negotiations to acquire Delaware & Hudson Co. David W. Wallace, Bangor's president, attributed the move to stock market conditions and the inability to negotiate formal assurances in the Bangor-D&H contract for the inclusion of the Delaware & Hudson Railroad in the Norfolk & Western Railway system.

• • •

BANGOR PUNTA CORPORATION (BNK)

RECENT PRICE	PRICE RANGE 1967-1968	EARNINGS PER SHARE 1968E*	1969E*	P/E RATIO 1968	1969
38 NYSE	61¾-35⅝	$2.20	$2.45	17.2x	15.5x

Capitalization (7/31/68): *Long-Term Debt: $11,569,000;*
$1.25 Cum. Conv. Pfd. (Series A-1) - 604,054
Common Stock: 2,152,752 *$2.00 Conv. Pfd. (Series C) - 597,000*

**fully diluted - excludes $0.14 non-recurring gain from sale of Blue Knox stock.*

Definition of Bangor Punta: *A diversified company deriving over half its earnings from law enforcement and leisure time, both of which have above-average growth potential in coming years.*

SUMMARY & CONCLUSION

Bangor Punta offers the investor a unique opportunity for participation in the growing expenditures of law enforcement agencies. In 1968 over 30% of after-tax profits will come from Bangor Punta's law enforcement group. Bangor Punta has built up its corporate momentum in this important and growing area. Starting from nothing in 1965, the company has a solid and leading position in the law enforcement industry. ERA expects continued growth both internally and through acquisition in this area.

Leisure time activities are generally considered to be a growth area of above-average potential. High personal disposable incomes and decreasing work weeks create demand for sporting goods and other recreational equipment. Bangor Punta has identified this trend and directed its efforts to building a solid position in this industry. The company is today one of the leading producers of boats and has started to expand its operations in leisure time mobile homes and campers. Over 25% of earnings are derived from the leisure time group. ERA expects continued growth in these activities.

All of this has developed out of a company that until just a few years ago was nothing more than a large tax loss resulting from the expropriation of the Cuban sugar properties of the Punta Alegre Sugar Corporation. The president of that company, Nicolas Salgo, joined forces with the president of the Bangor Aroostook Railroad, W. Gordon Robertson, who was interested in diversifying, and together they set about to build Bangor Punta Alegre Sugar Corporation, now known as Bangor Punta Corporation. The tax loss had an expiration date. Management was forced to race the clock, and many of the early moves at this company were made more for tax purposes than for long-range attractiveness. Sales grew from $49.3 million in 1963 to $160.5 million in 1967 and after-tax earnings (before non-recurring items) reached $5.5 million in 1967, up from $2.2 million in 1963. In the meantime, Bangor Punta evolved into a company that found itself not just a conglomerate, but a leader in two very attractive industries which supplied over half its earnings. Management at Bangor Punta is creative and will continue to seek out investment opportunities, but ERA also thinks that Bangor Punta may redefine its corporate purpose and dispose of some of its operations that do not fit current standards and direction. Purchase of the stock is recommended.

LAW ENFORCEMENT

ERA knows of no other company having the volume or diversity of sales to the law enforcement market as that now enjoyed by Bangor Punta. The company's Smith & Wesson division has a name that is as much a part of America's early history as Colt, Wells Fargo, or Western Union. It is today one of the world's largest suppliers of handguns, sold almost exclusively to police departments throughout the world. No guns are sold through mail order operations. The Navy, Air Force and Marine Corps have recently started to use Smith & Wesson 38's. There is a large and growing foreign demand which cannot be met from present facilities. Smith & Wesson's production facilities are now operating at capacity from a backlog that exceeds two years. With growing police demands and continuing foreign market growth, this backlog is not expected to drop within the near future. New production plants for Smith & Wesson are being

NO Small Potatoes

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Bangor Punta Has Built Up a Thriving Industrial Complex

By Leslie Gerber

ROM its vantage point high up in the Pine Tree e of Maine came word week from Bangor Pun- orp. — that amalgam re- ng from the merger in '61 of a refugee Cu- sugar concern and a po- hauling railroad — of a acquisition. The compa- which has been on a busy g spree lately, dis- d plans to purchase for 0 shares a 70-year-old n-based engineering planning firm, Metcalf & , Inc. At recent prices, deal bears an eventual tag of about $1.5 mil- (payment of 40,000 s is dependent on earn- , which contrasts with lf's annual volume of han $10 million.

re noteworthy, Metcalf s Bangor further into water supply, sewage ment and refuse dispos- ld. For Bangor, diver- ion has become a way . Recent mergers have ened the company's ties into farming, med- upplies and chemicals, o of its stakes in tex- processing equipment, and guns. What it all up to is concern that late set a pretty fast

at's apparent from the s. For the fiscal year September 30, 1967, probably approximat- million (including re- f Bangor & Aroostook nd). The company's 32.6 million in fiscal d $31.5 million in fis- . Excluding the carri- ings are believed to advanced from $117 to $130 million. About the gain stems from acquisitions, and the on growth of existing ers. Of fiscal 1967's ate gross, around 30% nts additions to Ban- ter made over just t two years.

On the Rise

Profits, too, have risen swiftly. Last year's net probably hit around $2.10 a share, against $2.30 (adjusted for a full tax load and before a nonrecurring charge of $1.71) in fiscal '66. At the nine-month mark, the respective figures were $2.09 and $2.33 (including .39 cents in special credits). The fiscal '67 earnings were helped by a lower tax rate (roughly 35%-38%, against 48%), due chiefly to investment tax credits. Calculated on the combined convertible preference shares and common outstanding, the fiscal 1967 and 1966 per share profits work out to $2.60 and $2.68, respectively. Adjusted for conversion of all outstanding convertible securities — a potential dilution of 29.7% — net for fiscal '67 amounted to $2.15.

As to the current fiscal year just getting under way, Bangor appears on the way to further gains. Specifically, sales may rise to $250 million, while earnings, fully taxed, may hit $1.30 per share on common now outstanding. That translates to $3.45 on the combined preference and common shares, and $3 fully diluted.

Bangor Punta is an outgrowth of two companies—Punta Alegre Sugar Corp. and Bangor & Aroostook Corp. These were unrelated corporate entities until their combination in the fall of '61. Seven years ago, Punta, a former Cuban sugar producer, was a firm with no operating assets and $3.5 million in marketable securities. Bangor was essentially a potato-hauling railroad with a fair profits background but little growth potential. Between 1959 and 1961, however, Punta had acquired three concerns and Bangor picked up four. Thus, each was a diversified company at the time of their combination.

Rigid Yardsticks

Acquisitions since then have been guided by some fairly rigid yardsticks. One requisite is that the pretax income of a candidate should return annually 20% on the B-P investment. Bangor Punta also requires a proven record of growth and profits, potential for further growth and competent management.

A somewhat different deal has been worked out with the "Katy" (Missouri-Kansas-Texas Railroad). M-K-T, under B-P guidance, will pursue a diversification program through a new holding company. Bangor, at the outset, will purchase a part interest — about 5% — in the holding operation. Eventually, Bangor has the right to enlarge its stake to 10%, through options. The move enables M-K-T to cash in on B-P's know how in the merger game. Since M-K-T's cash resources are on the limited side, the program doubtless will be a buildup, similar to the Bangor operation, involving liberal use of earn-out arrangements and stock bonuses.

This was the method which, at the expense of some dilution, put Bangor Punta on its feet. The company today is considerably stronger financially, and from now on it's unlikely to employ this particular approach to any great extent. In fact, in 1966, most remaining write-out obligations were eliminated.

Conceivably, Bangor Punta may extend its own activities in the railroad field. For instance, the B-P management could be interested in a takeover of the Maine Central, with which it has had discussions.

Quick to Act

Meanwhile, Bangor does had its share of headaches. A couple of holdings have been dropped, and at least one minor interest soon may be liquidated. The reasons involved changes with reduced profitability, or the fact that an acquisition didn't fit into the pattern first envisioned. B-P doesn't linger indefinitely on anything which sours for one cause or another, and for which a careful assessment presents no apparent ultimate remedy.

What it likes, though, it is willing to pay for. B-P will pay handsomely above book value for products it deems to have exciting profits potentials. This shows up clearly in the latest (July 2, 1967) consolidated balance sheet, which reflected an "excess of cost over net assets of companies acquired" in the amount of some $24.1 million.

Bangor Punta's fiscal '67 volume broke down about as follows: textiles 40%; consumer products and processing equipment, 17% each; law enforcement, 10%; and service fields, the rest. As a result of recent major acquisitions, this mix will be modified over the coming year.

Bangor Punta, for one thing, is about to enter a new area by taking over the assets of Producers Cotton Oil Co. (Fresno, Calif.). PCOC, an extensive landowner through the San Joachin Valley, does a $36 million annual trade in sale of grown crops and processing of agricultural products for others.

Pleasure Boats

Moreover, B-P has acquired a 65% interest in Starcraft Corp. Headquarters, at Goshen, Ind., the concern is a leading manufacturer of power boats, sailboats and campers. Starcraft rests out Bangor's dozen-odd O'Day-Chrysler [illegible] complex, and establishes B-P as the largest factor in the domestic pleasure craft industry.

ALC

179G-1. [Proposed by Chris-Craft and the SEC]

Mr. Reames testified as follows at pages 58-61:

Q. In other words, you estimated in your memorandum of July 2 a loss of 17.7 million in the sale of the right-of-way for tax purposes.

A. That would be based on the assumption that the tax was the same.

Q. And Mr. Hutchins estimated the loss of 4.1 million for tax purposes, for the same property; is that correct-- is that your understanding?

A. From reading this, that seems to be correct.

Q. Just referring to the right of way, is that your understanding?

A. That is the way it looks.

Q. Can you tell me why there would be such a large difference? Do you know why there is such a large difference between your estimate and Mr. Hutchins' estimate?

A. No, unless it is in the assumptions. I can tell you what the assumptions are on this exhibit 3 but I do not know on exhibit 4. They are not marked.

Q. Mr. Hutchins' last sentence in which he starts " ' best estimate at the moment is that these cost figures will show a 15.8 cost basis." Are you stating you do not know on w t

assumptions that 15.8 figure was arrived at?

A. That is correct. I do not know what the assumptions were on that.

Q. Do you know who estimated that 15.8?

A. No.

* * *

Q. I understand but there is such a significant difference, it seems, between your figures and Mr. Hutchins' figures and in a short period of time I should think this would stand out in your mind somewhat.

In other words, you originally estimated, I believe, 29.4 and Mr. Hutchins is estimated about half of that. I just thought this would stand out in your mind as a significant point.

A. Those figures are very elusive mainly because you keep the records for the railroad and for tax purposes on an apparently quite different concept.

If it was depreciable property, you would keep them for tax purposes also. But if it was non-depreciable, then there was little reason to go to all of the work to update your records to put them on a comparable basis especially when you had to keep them primarily on the ICC basis. So there was-- I can see where there would be a difference because there was some speculation, that is why we more or less spelled out our assumptions and tried to write them out and put a number

down so we would know that, if ultimately we were wrong on that, we were not stating it as an opinion or as a view. We were stating it as an assumption more or less.

179J. [BP] (a) Between the foregoing meetings on June 24, 1969 and early August, 1969, except for Mr. Reames' memorandum of July 2, 1969 (Exhibit W ~~see Finding 179E~~), no further tax and accounting studies were made with respect to the disposition of the BAR.

(b) Sometime in the week of July 21, 1969, Mr. Dumaine made an inspection trip over the BAR, and Mr. Owen Gould, Controller of the BAR testified concerning that trip as follows:

"Q Let's go back a second, Mr. Gould.

Prior to Mr. Priddle's conversation, the telephone call to you in early August, prior to that time, and subsequent to the time that you prepared the balance sheet which you testified to earlier, did you ever learn or did you learn that Mr. Dumaine had any interest or was expressing an interest in acquiring the Bangor Aroostook Railroad?

A Yes

Q Do you recall when you learned this?

A During a staff meeting called by Mr. Strout, the president, and this was during the middle of July and all department heads were present, some 15 or 16 fellows, and he told us that Mr. Dumaine was going to come on the property and that he was interested in acquiring the Bangor Aroostook Railroad.

Q Do you recall whether Mr. Strout said anything else?

A That is basically all. The real purpose of the meeting was to inform us of his presence on the property and to arrange for the special train.

"Q Did Mr. Strout say anything about keeping this confidential?

A He said if anyone was to ask why, we were to say Mr. Dumaine was interested in the Bangor Aroostook."

(c) [Proposed by SEC and Chris-Craft] Mr. Hutchins testified concerning Mr. Dumaine's trip as follows:

"Q Did you have any further conversations in June with Mr. Dumaine about the sale of the railroad?

A The only conversation I remember was Mr. Dumaine saying he would like to go over the railroad, hopefully that the arrangements that he and I had made would be finally consummated, and I made arrangements for him to take a trip over the railroad in the business car, for his people to look at it."

179M. [BP] (a) After assuming responsibility for coordinating the investigation, Mr. Reames advised Mr. Cyrus Priddle, the Tax Manager of Bangor Punta, that the Bangor Punta Board was considering disposing of the BAR and that he had been instructed by the Bangor Punta management to investigate the tax and accounting aspects of various alternative plans for divestiture. Mr. Priddle was instructed to attempt to determine if the tax basis or the original cost of all of the BAR's assets could be ascertained and to call upon Mr. Gould of the BAR for any assistance he may need.

(b) Mr. Priddle testified concerning the discussion with Mr. Reames as follows:

Q Were you instructed at some time in 1969 to examine the records of the Bangor and Aroostook Railroad Company to attempt to determine the basis for tax purpose of the assets of the railroad?

A Yes, sir.

Q When were you first instructed to do this?

A To the best of my recollection, it was around the first week or the end of the first week in August of 1969.

Q Who instructed you?

A Mr. Timothy Reames.

Q Anyone else present at the time?

A No, sir.

Q What did Mr. Reames say and what did you say?

A Well, Mr. Reames informed me, confidentially, he said, that Bangor Punta was thinking about selling the Bangor and Aroostook Railroad and in order to do this he had to submit alternatives to Mr. Salgo, chairman of the board, as to which would be the most appropriate way, tax wise, to sell the railroad, whether to sell the stock or whether to sell the assets.

Now, in the normal course of events we would have had all this information but the railroad records went way back to 1892. They had some fires that destroyed some records and therefore we didn't have this information readily available pertaining to the basis of the railroad assets.

Q Let me interrupt for a minute. Is this something that came up in this first conversation with Reames, the state of the railroad records? Is this something that Reames said or you said?

My question was, what did Reames say and what did you say during this first conversation? Did this arise during the first conversation?

A Yes. Reames told me that I had to go and get a tax basis on the railroad assets and I had mentioned to him that prior -- in prior years, Owen Gould and myself had often talked about this and that it was going to be very hard to resurrect the cost, because the records were just no longer on the railroad premises.

Q This is something you told Reames during your first conversation?

A Yes, sir.

Q Did he say anything in response to that?

A Yes. He told me to make arrangements to do what I thought and consult with people that would end up in us obtaining, at least tentatively, an estimated approximation of what the actual cost of the railroad assets were for tax purposes.

Q After this first meeting with Reames, what did you do?

A I contacted Owen Gould in Bangor, Maine, made arrangements to go up to see him and we had conferences, I believe, in Mr. Strout's office. Mr. Strout is the president of the railroad.

(c) Arrangements were made for Mr. Priddle to visit Mr. Gould at the BAR offices in Bangor during the week of August 11, 1969 to begin his investigation.

179N. [BP] (a) On August 7, 1969, there was a meeting of the Bangor Punta Board at which Bangor Punta management again stated their recommendations that the BAR, the process engineering and the textile divisions should be separated from Bangor Punta.

(b) The relevant portion of the minutes of such meeting reads as follows:

"OPERATIONS AND ADMINISTRATION

Status Report.

...

Mr. Salgo also informed the Board that in the overall planning of the management of the Corporation, it is deemed advisable that we should dispose of certain assets which no longer appear to fit into the growth pattern of the Company. These would consist of the Railroad, the Process Engineering Group, which it is believed could be sold in components at a better aggregate price than if sold as one entity, and the Textile Group. It is essential, of course, that the Corporation achieve real hard values for these companies."

(c) Other than the statement above, the minutes do not reflect any report concerning the BAR. This was the first meeting of the Bangor Punta Board since May 21, 1969 and in the interim there had been two meetings of the Executive Committee of the Board held May 26, 1969 and July 1, 1969, and the minutes of the Executive Committee meetings do not contain any reference to the BAR.

1790.1[illegible](b) Mr. Gould contacted the ICC and the following is a note made by Mr. Priddle at the time concerning Mr. Gould's conversation with the ICC:

> "Bangor and Aroostook
>
> Recommendations for establishing a tax basis for the fixed assets
> (Mr. Garrett)
> 1. A representative, of the ICC in Washington, D.C., informed Mr. Owen Gould, he could, upon a short notice, make all the old ICC records available to us. He stated several other railroads have utilized these records and found them of value in working out similar problems as now confront the BAR."

(d) In 1916, the ICC pursuant to its statutory duty had the assets of all railroads in the United States appraised to ascertain their then (1916) reproduction cost. These appraisals were performed for use in establishing tariffs.

71 - 5:c

1790-1. (Proposed by SEC and Chris-Craft [redacted])

During his visit to the Railroad ~~in mid-August~~ between August 13-15 1969, Mr. Priddle prepared the annexed schedules (SEC Exs. 35J-35M; Priddle dep. 51-52).

179P (c) One of the statutory duties of the ICC, pursuant to Section 19a of the Interstate Commerce Act, in the 1916------ valuation was to establish the original cost of all of the MR's assets in addition to their reproduction cost in 1915.

179T. [DP] On September 15, 1969, a meeting was held in Bangor, Maine of all the principal persons on the staffs of Bangor Punta and the BAR concerned. At this meeting, various staff members were given responsibilities for assembling material to be used in the sale of the BAR whether it was a sale of stock or assets. Annexed is a copy of a memorandum of this meeting.

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V EXF

BANGOR PUNTA CORPORATION

SUBJECT: BANGOR AND AROOSTOOK RAILROAD MATTER

TO: N. M. Salgo
W. G. Robertson
D. W. Wallace
J. E. Flick
C. M. Hutchins
W. J. Strout
S. Galle
T. P. Reames
W. M. Houston
T. D. Stephenson
O. H. Bridgham
O. J. Gould
R. L. Condon

September 16, 1969

- PERSONAL AND CONFIDENTIAL -

From: C. P. Priddle

We are herewith attaching two memos. One pinpoints the responsibility for obtaining certain information required, as ascertained in a meeting in Mr. Strout's office on September 15, 1969. The other stipulates steps to be taken to expeditiously arrive at an asset tax basis of the BAR, along with other considerations to be weighed.

It was agreed that the BPC and BAR personnel involved in this matter would work closely together, coordinate their efforts, and keep the "communication lines" open in order to expedite the entire matter.

cy

MEETING HELD IN MR. STROUT'S OFFICE
ON MONDAY, SEPTEMBER 15, 1969

NT: W. G. Robertson
C. M. Hutchins
W. J. Strout
O. H. Bridgham
O. J. Could
T. P. Reames
C. P. Priddle

... to the pending Bangor and Aroostook Railroad matter, Mr. Reames raised ... points and questions that required analysis and/or answers. These items ... forth below under the names of the individuals to whom Mr. Strout relegated ...sponsibility of supplying the necessary information.

WILLIAM H. HOUSTON

...hat action is necessary to transfer the State of Maine franchise of the ...gor and Aroostook Railroad? (In a sale of stock and in a sale of assets - ...n ways.)

... the Bangor and Aroostook Railroad a normal Maine corporation or is it ...pecial" by virtue of its railroad operations?

...es the considered transaction require ICC approval?

...Reames would appreciate Mr. Houston furnishing him with the following:
(a) A copy of the Bangor and Aroostook Railroad charter.
(b) A copy of the by-laws of the Bangor and Aroostook Railroad.

OWEN H. BRIDGHAM

...pread of Bangor and Aroostook Railroad stock prices for approximately the ... fifteen years or more. Preferably, this analysis should include the year ... years when the price range was $60.00 per share.

OWEN J. COULD

...equired - a list of all minority interest stockholders, denoting name of ...tockholder, address and number of shares currently owned. Owen Could ...upplied this list to Tim Reames on September 15, 1969.

...hat comprises the major contractual commitments, not recorded on the books? ...r. Strout mentioned an order already placed for 100 box cars and an order not ...et placed for 50 mechanical reefers. No delivery, to date, has been made on ...the 100 box cars herein mentioned.

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W. J. STROUT AND O. J. GOULD (COLLECTIVELY)

Mr. Reames requested that some thought be given as to how the fair market value of rolling stock of the Bangor and Aroostock Railroad could be determined. Mr. Strout stated that he and Owen Gould would take this matter under consideration and study it through before any project in this regard is undertaken. Mr. Reames stated that he thought this value would be required at a later date, when finalizing the negotiations.

ner sundry topics taken up for discussion covered:

Mr. Hutchins stated that "good title" should be delivered to the purchaser by December 15, 1969, although it must be determined if approval of the State of Maine is required, and if so, whether the legislature must pass on this and also the approval of the ICC and the timing of this approval.

It was also agreed, that although the investment in Bangor Investment Company was a saleable asset of the Bangor and Aroostock Railroad, a follow-up would be made on the "non-railroad" land owned by this company, namely, Sears Island and the property at 84 Harlow Street, Bangor, Maine, among others, to determine any unique tax ramifications that could develop in this respect.

Further discussion gave voice to the consideration of approaching the IRS engineers, in advance of a closing, "to feel them out" with the possibility of obtaining a determination in regard to the basis of assets, once it has been ascertained. This would be beneficial in order to determine, before Federal audit, that there would be no threat of a consideration of goodwill on the part of the auditing agent at a later date, or an attempt to revise our basis. The problem of distributing the selling price to assets also arose. It was agreed to pursue this matter further, when the mechanical function of arriving at a tax basis for sale of assets had been completed.

n the drafting of the agreement for the transfer of stock or assets, it is anticipated hat some of the information outlined above and certain additional information will be equired for attachments as schedules to the agreement. As soon as we know the nformation needed, we will relate it to Mr. Strout via telephone, or in his absence ... would.

OUTLINE OF PROPOSED STEPS TO ARRIVE AT A TAX BASIS RELATIVE TO SALE OF BAR ASSETS - AS AGREED BETWEEN O. J. GOULD AND C. P. PRIDDLE

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Mr. Strout authorized Owen Gould to assign one BAR staff member, who is familiar with the pertinent records, to a temporary assignment in Houlton, Maine. The object of his labors would be to determine what properties are still on hand at September 30, 1969 that were on hand at June 30, 1916, and their assigned ICC values. This project primarily consists of developing the information from 1963 through 1969, and will take an estimated 2-3 weeks to complete.

Mr. Gould and Mr. Priddle agreed to visit the Houlton, Maine installation on Tuesday, September 16, 1969, to familiarize themselves with the problems and other facets of developing the required information. If possible and feasible, they will attempt also to arrive at a preliminary figure at Mr. Reame's suggestion.

The second step in this regard will be the determination of value of all assets acquired between June 30, 1916 and September 30, 1969, at cost.

A third step will involve computing the value of all retirements, abandonments, etc. and their related ICC assigned values.

When the above three steps have been completed, it was agreed that a decision will have been made as to the following:

(a) A method of converting those items, priced in accordance with ICC valuations, into tax costs.

(b) A method of distributing the selling price.

(c) The mechanics of consulting the ICC and/or the IRS relative to securing an approval or determination on the tax basis and the distribution of the selling/purchase price arrived at in the above steps.

For tax purposes, all items capitalized per past Federal Revenue Agents' Reports will be considered for inclusion in the final tax basis.

A determination of the breakdown of costs in "roadway" and "equipment" accounts will have to be made on the four railroads whose records were burned in a fire and are not available. This item also possibly should be referred to the IRS and the ICC for approval and final determination.

A discussion between Owen Gould, Ronald Condon, and Cy Priddle relative to handling of "recapture" tax aspects on the BPC Federal return concluded that Ronald Condon would compute the investment credit recapture schedule. He would also compute the gains and/or losses on #1231, #1245, and #1250 property, and depreciation recapture on same, if any.

Explore the "book and tax" effects of reversing the liability of $6,500,000.00 in Deferred Federal Income Taxes, on the books of the BAR.

Also follow up the investment credit ramifications of freight cars ordered prior to April 20, 1969 (the propored date for rescinding the investment credit) where delivery of these freight cars will not be made until June 1970 approximately.

Mr. Gould and Mr. Priddle mutually agreed to contact each other regularly, if and when an extraordinary item should be pinpointed by one of them in the course of all the calculations. They will also check out together periodically and discuss the progress of the project, and any steps that might be taken to expedite same.

179U. [BP] On September 15, 1969, Mr. Hutchins wrote to Mr. Dumaine the annexed letter.

588A

BANGOR PUNTA CORPORATION

04 HARLOW STREET • BANGOR, MAINE 04401 • TELEPHONE AREA CODE 207 • 945-5611

September 15, 1969

Mr. F. C. Dumaine, Jr.
President
Amoskeag Company
Suite 4585
Prudential Center
Boston, Massachusetts 02199

Dear Buck:

In working toward the closing of the sale to Amoskeag of the Bangor and Aroostook Railroad, Bangor Punta has not yet reached a decision as to whether it would be most advantageous to sell our stock in the Bangor and Aroostook Railroad Company or to sell the property in the form of assets. To preserve to us the option pending further investigation, we propose:

To work out with your people an agreement to sell the property either in stock, and if stock, either for cash or for shares of Bangor Punta) or as a sale of assets. In either case, we would like to preserve the option of taking cash or shares of Bangor Punta.

This agreement would become effective on either September 30 or October 1 with you to take control of the property on either of those dates.

We would agree to make delivery of either the stock or the assets by December 31 of this year. Since this agreement will be a firm commitment on our part to sell the property to you, I am assuming that you would match that commitment with a deposit of the purchase price in escrow pending the year-end closing.

We find it may well be advantageous to you to accept assets rather than stock depending on the results of our accounting studies in which I assume your people might like to participate.

The December 31 final closing will give us time to develop dependable figures as well as to allow you and your accountants to satisfy Amoskeag that you are getting the property as it has been represented to you. Consequently, we would want you to satisfy yourself by that date that you are receiving the Railroad as a going concern, as represented, so that any guarantees on our part would not go beyond this final closing.

I would hope that our lawyers and yours could work out this selling agreement before you leave on Friday, September 19, so that we might consider a joint announcement of the sale on that date. It seems to us that we both have an obligation to make disclosure as soon as we can.

To: F. C. Dumaine, Jr.

The agreement will include, as per my letter of May 27, the parameters and description of the fifty-fifty split between us of any windfall profits over the next five years in connection with Searsport and the Sears Island-Cape Jellison area.

That letter indicated, which I know you understand, our ownership of Railroad stock as 98.7% of the total.

Very truly yours,

Curtis M. Hutchins

CMH:Bec

179W-1 (Proposed by SEC and Chris-Craft [redacted])

The Internal Revenue Service was not consulted on the subject of establishing a cost basis for the Railroad (Priddle dep. 40-42; Gould dep. 74; Reames dep. 33).

179F(b) On October 2, 1969, the day before the sale was announced, Bangor Punta common stock closed at $21.50 per share on the NYSE. On October 3rd, Bangor Punta common stock closed at $21.00 per share. Between October 2nd and October 17th, Bangor Punta closed at a low of $20.50 on October 10th, to a high of $24.125 on October 17th.

181. [Proposed by Chris-Craft] Piper's 1967 Annual Report contained the following under the heading "Research" with regard to the proposed PA-35 Pocono ("Pocono") aircraft, at page 9:

> "The major advanced research project at Vero Beach during 1967 has been development of the design of an 18 place Commuter Airliner with high cargo-passenger utility. This model should fill a great need in the small airliner field, an area which shows considerable promise and with which we are well acquainted because of air-taxi and similar uses of the Aztec and Navajo."

182. [Proposed by Chris-Craft] In a memorandum dated May 29, 1968 entitled "PA-35 Status Report", prepared by a Piper project engineer for the Pocono located in Vero Beach, Florida, the following is included at pages 4 and 5:

"7. Powerplant

The engines have been performing as well as we expected. We have good drawing coverage of the various installations of this particular powerplant. There is much concern in my mind, however, about the effect of the Lycoming Type-Certification and its effect on our certification program. According to our powerplant group, Lycoming is not progressing well on the T.C. program. As a matter of act, it was stated that they are changing the engines to such an extent that neither of our present engines can be certified. They would both have to be replaced with the new version. I can see a Lycoming powerplant program longer that our certification program if we aren't careful. (emphasis in original)

"It appears that in addition to carefully checking on and monitoring the Lycoming program, that we should set aside our best powerplant people and get them going on a P.T.6. Turbo-prop design as soon as possible. It would seem to be the best insurance company-wise that we could come up with. If the Lycoming program worked out too, we would be able to offer both types of airplanes at an earlier date then previously scheduled."

183. [Proposed by Chris-Craft] A Piper news release dated June 5, 1968 stated, in part, as follows:

"NEW PIPER AIRLINER NAMED POCONO: MAKES MAIDEN FLIGHT ON MAY 13

"Piper Aircraft Corporation's 18-place commuter airliner has officially been given the name of POCONO. The new plane has been undergoing continuous flight evaluation tests following its maiden flight on May 13.

"Assigned model number PA-35 when it went on the drawing boards two years ago at Piper's Research and Development Center at Vero Beach, Florida, the new aircraft will be priced in the $200,000 category.

* * *

"The PA-35 was specifically designed for commuter service (third level airline) which has rapidly become a high-utilization operation, featuring frequent and rigorous schedules over relatively short routes. Piper's POCONO fills the need for an aircraft of modern design that offers adequate passenger seating, large luggage capacity and greater cargo capability along with realistic operating economy. Special attention has been paid to quick and easy access to all systems for servicing or fast replacement.

"Although the plane was conceived primarily for commuter and cargo service, it has attracted much greater interest as an executive transport than was originally anticipated by Piper Aircraft.

"Two noteworthy changes have been made since preliminary specifications were released last October. The twin turbocharged engines have been increased in horsepower from 470 to 500 and the original gross weight of 9000 pounds has been increased by 500 pounds."

The aforesaid news release was distributed by Piper only to aviation publications.

183A. [Proposed by Piper] A letter dated July 5, 1968, Subject "LYCOMING -- PIPER VERO BEACH MEETING JULY 3, 1968" from R. C. Scott, Piper's Assistant Chief Engineer in Vero Beach, to L. J. Anderson of Lycoming, included the following:

"T10 - 720 Engine (PA-35 Program)

The decision was made to increase the rated max continuous power on this engine to 520 Horsepower in order to handle an aircraft gross weight of 10,000 pounds. Lycoming will proceed immediately with a program to provide for installation of larger turbo chargers, new exhaust manifold, new counter-balances, etc., as required to get the additional horsepower. In the mean time, Piper will conduct fuel flow tests on the present aircraft/engine installation and advise Lycoming of the results. Lycoming can then review our past flight test data and verify our computed horsepower figures. Lycoming estimates the weight increase for the new engines at approximately 22 pounds per engine.

"Lycoming will plan to provide Piper with four calibrated engines in the above configuration no later than February 1969. Two of the engines will be those presently used on our flying prototype reworked to the new configuration. We will continue to operate the aircraft to gather additional information until it is necessary for us to send these engines to Lycoming in order to meet the February 1969 date.

"Torque meters were also discussed in conjunction with the T10-720 Engine. It was concluded that it is not practical at this time for us to utilize a torque meter and we will instead rely upon fuel flow, manifold pressure and RPM to determine our power settings."

184. [Proposed by Chris-Craft] A memorandum dated August 15, 1968 entitled "Vero Beach Development Review", prepared by Eugene L. Stickley, Piper's Manager of Corporate Planning, stated with respect to the Pocono, in part, as follows:

> "A review of the Vero Beach Development Program was held on August 8, 1968, in Vero Beach.
>
> (at page 1)
>
> * * *
>
> "The review included particular emphasis on new projects which Pug wants completed during 1969. These projects are as follows:
>
> I. PA-28R-200
> II. PA-38-115
> (at page 1)
>
> * * *
>
> "Priorities and Timing
>
> Howard Piper had indicated that the following priorities have been reviewed with the Development Planning Committee and should be followed for the Vero Beach development work for 1969:
>
> I. PA-28-200
> II. PA-28-115
> III. PA-32B Turbocharged
> IV. PA-34
> V. PA-35
> (at page 3)
>
> * * *

"III. Lycoming's Part

One of the essential steps to meeting our requirements and solving our problems with this airplane is additional horsepower. Our studies have indicated that the Lycoming 720 engine will have to be rated at 520 HP continuous in order to provide the required minimum performance. Lycoming has committed itself to accomplish this.

IV. Revised Payload

As a part of Vero Beach's analysis and design proposal, Bob Scott indicated that in order to meet the minimum single-engine climb requirement, our gross weight will have to be limited to 9,750 lbs. At the present indicated empty weight of the airplane, this gross weight limitation will require us to consider the airplane a 14-passenger airplane rather than a 16-passenger (plus 2 pilots). The only way to achieve the 16-passenger requirement as outlined above (I), would be to add 10 feet to the wing span. There is no simple way to do this. It would require a major redesign of the wing. Howard Piper indicated that we will accept this gross weight limitation rather than go into a wing redesign program.

Pug pointed out that the airplane might be considered a 17-passenger airplane without baggage and counting the pilot's seat as a passenger seat. (page 6)

* * *

"B. The above steps will be carried out in sequence to try to determine the value of each modification. If there appears any doubt about the success or failure of this approach, it was agreed that an independent flight test consultant, Fritz Feutz, will be called in for his evaluation. (at page 7)

* * *

VII. Summary

A certificatable airplane now awaits two developments:

A. The development of 520 horsepower by Lycoming. We have assurances from Lycoming that this will be done." (at page 7)

184A. [Proposed by Piper] A Lycoming memorandum dated September 3, 1968, Subject "Trip Report to Piper, Lock Haven August 21, 1968" included the following:

> "A meeting was held at Piper, Lock Haven, at Lycoming's request to review various programs at Lycoming for Piper.
>
> 1. T10-720 (Vero Beach)
>
> "Torsional surveys have been completed on this engine using the three blade Hartzell 8475 propeller. Fifth and Fourth order resonance of an acceptable nature was present at 2200 rpm full throttle maximum power. Third order resonance occurred at 2750 rpm which is outside the operating envelope. The engine was approved at 520 hp, 2650 rpm. Since then Hartzell has run blade stress checks at Lycoming using a two blade (turbine) propeller, a two blade (8475) propeller, the three blade (8475) propeller, and the three blade (8475) propeller cut off two inches on each blade. Preliminary information from Hartzell indicates both three bladed propellers would be acceptable with the bigger diameter being preferable. They will wait for flight blade stress checks before determining if placards are necessary. Torsional tests are now in progress on this combination and should be finished September 13, 1968. Due to the additional running required to approve a propeller and engine combination the date of delivery of the 520 hp sales samples will be delayed approximately one month from the February promised date.
>
> "A request was made that the cooling tests on the Prestolite alternator be given high priority so that we can determine the necessity for releasing blast tube tooling.

It was agreed by H. Piper and Bruce McCullough to speed up this test by loading one alternator during subsequent flights to determine cooling characteristics without the blast tubes. Lycoming agreed to have an installation engineer present when the tests were run.

"A date for production aircraft was tentatively set for January 1970 for Lycoming scheduling of type tests, etc."

~~[Chris-Craft does not contest that Piper received the memorandum or that the memorandum contains the statements quoted above.]~~

185. [Proposed by Chris-Craft] During September 1968 pre-certification flight evaluations under FAR 23 of the prototype Pocono were conducted by Testair, Inc., which had been employed for this purpose by Piper. The report of such flight tests stated, in part, as follows:

At page 1:

> "The object of this program was to conduct a pre-certification flight evaluation of the prototype Piper PA-35 Airplane for FAA Part 23 certification compliance. As this aircraft has been evaluated by Piper Aircraft Engineering Flight Test Department our normal pre-certification program was modified to specific items desired by Piper Flight Test. The resulting program eliminated all performance and several flight characteristic items. Essentially the program consisted of handling quality evaluation except stall characteristics, longitudinal pitch control below Vx and single engine characteristics. However, Vac speed was checked.

* * *

At pages 2, 3 and 4:

> "* * * The aircraft was extensively covered with wool tufts on the fuselage and wings during these tests, and the airspeed referenced from the left wing tip boom mounted swivel pitot-static. The airspeeds were measured in MPH.
>
> "PROCEDURE
>
> All flights were conducted at a take-off weight of approximately 9,030 lbs., at 25% MAC aft CG or 13% forward CG. Due to anticipated engine power growth full

NC

power cannot be duplicated with the prototype engine, however, simulated 75% MCP was used where it was applicable.

Four flights, a total of six hours flight time, were made, all at aft CG except one flight at 13% MAC. The reference speeds used for this evaluation are as follows:

Landing gear speed	150 MPH
Flap speed	130 MPH
Vso	80 MPH
Vsl (flaps up)	93 MPH
Vmax	180 MPH
Max flap deflection	30°
Max manifold pressure	46 in. Hg.
Max RPM	2500
75% power (prototype engine)	32 in. at 2500 RPM
75% power (simulated future engine)	40 in. at 2500 RPM

DISCUSSION

As this was an objective critical item evaluation of the prototype airplane for the purpose of determining non-certifiable items, only non-compliance items will be listed. Subsequently the general impression of the aircraft and noteworthy features will be summarized. Non-compliance items are as follows:

1. Climb configuration longitudinal stability.

2. Lateral stability at speeds from 1.2 to 1.4 Vso in the landing flap, power-on configuration.

3. Rudder lock in the power-on landing flap configuration, wings level skid maneuver.

4. The speed with left engine inoperative is 116 MIAS, and rudder forces are approximately 150 lbs.

5. Premature stall warnings buffet in the clean configuration beginning at 110 MIAS.

6. Marginally high longitudinal wheel force with power and configuration changes at the forward CG position.

7. Possibility of excessive unusable fuel in high power sideslip configuration."

185A. [Proposed by Piper] An article concerning the Pocono appearing in the November 4, 1968 issue of Aviation Week & Space Technology entitled "Test Shows PA-35 Needs More Engine Power, New Wing Fillet" includes the following:

> "Flight testing of the prototype Piper PA-35 twin-engine commuter airliner has shown a need for increased engine horsepower and redesign of the wing fillet to meet performance specifications.
>
> "Tests are continuing and production is expected to begin in 'not less than a year' according to officials at Piper's research and development center at Vero Beach, Fla.
>
> * * * * *
>
> "The prototype aircraft weighs 9,000 lb. and is powered by two Lycoming T10-720 turbocharged engines rated at 470 hp. each. Approximately 125 flight hours have been logged since the first flight last May (AW&ST May 20, p. 111).
>
> "Modifications to the PA-35 design will result in a gross weight of 9,750 lb. for production aircraft and will require power output of each engine to be increased to 520 hp. according to company engineers. Further testing will probably result in a certificated gross weight of 10,000 lb.
>
> "Type testing of the improved engines by Lycoming has been completed and delivery is expected by next spring for installation on the prototype PA-35.
>
> "The improved engines will be eight-cylinder turbocharged powerplants with 720 cu. in. displacement each.
>
> * * * * *

"The company has discontinued production efforts on a second PA-35, which was originally intended to incorporate all changes developed during prototype testing. Production presently is limited to completion of a static test article and construction of a mockup of the interior of the aircraft to evaluate cabin arrangements."

186. [Proposed by Chris-Craft] A draft Piper memorandum prepared by Marketing Research dated November 5, 1968 entitled "PA-35 Review" stated, in part, as follows:

> "This review is an attempt to consolidate Piper's information as of this time so that it can be objectively discussed and analyzed. We've had five major sources for inputs of data which have ranged from educated judgments to factual reports and as always, the task is to determine the value to be placed on each piece of data:
>
> (1) Arthur D. Little Report
> (2) FAA Air Taxi Studies
> (3) International Study
> (4) Reports from the Domestic Air Carrier Department
> (5) Inputs from our management group based on limited field contacts and overall knowledge of the business.
>
> Of primary concern is the fact that availability of the product has been delayed while most of our information was compiled over a year ago. During the past year there have been changes in the markets and we must anticipate that each successive year will bring further developments which could affect our sales of the PA-35. (at page 1)
>
> * * *
>
> "At the time we engaged Arthur D. Little to study the Domestic markets, the PA-35 prototype had not been built, although parts were in the process of being constructed. Consequently, we were forced to use the best estimates available on specifications for their work. Our Domestic Air Carrier Department as well as all others were also working with these preliminary specifications and reactions were based on this data. Since that time, there

have been significant changes which must be considered to determine whether the conclusions reached in 1967 are still valid or whether the changes have affected the marketability of the product, and if so, how? There are actually three specific bench marks we can use to compare:

(1) June, 1967 when specifications for the ADL study were finalized;
(2) January, 1968 when the International study was initiated and
(3) Today.

	1967 ADL STUDY	1968 INTL. STUDY	1968 TODAY
ENGINE	TIO 720	----	---
H.P.	450	470	520

(at page 2)

* * *

"C. TIMING

For purposes of their work, Arthur D. Little was instructed to use early calendar, 1969 as the availability date for the PA-35. This was the date used by all of us also in talking with operators and interested parties and it was on this basis that we formulated certain conclusions.

In the International Study last spring we asked the respondents whether late fiscal 1969 was satisfactory and if timing was critical. In both studies, timing was acceptable but most operators indicated delays would be costly. Our present schedule calls for a few units to be produced in fiscal 1970 and full scale production (1/2 per day) in fiscal 1971.

This represents a delay of two years from the earlier estimates in a situation where timing was deemed critical. During this two years, Beech and DeHavilland will have been delivering

airplanes at approximately 200 per year. Over 400 aircraft will have been sold into the prime market. (at pages 3 and 4)

* * *

"The effect of timing relative to competition was discussed in (c). The PA-35 was designed to meet a 1969 market. By 1971 when it becomes available to customers, demand will have changed. Operators are already indicating a need for more revenue seats. Beech and DeHavilland, with the advantage of close association with the best operators, will be making changes in their aircraft to satisfy the requirements while we are struggling to get ours in service. Consequently, instead of being competitive in 1971, we'll still be two years behind." (at page 4)

186A. [Proposed by Piper] An article in the November 11, 1968 issue of American Aviation magazine entitled "Piper Pocono PA-35 Undergoing Testing" included the following:

"Vero Beach, Fla. - Flight characteristics and performance data on the new PA-35 Pocono are taking shape at Piper Aircraft's plant here, where the company's largest airplane is undergoing testing.

"Flight time on the prototype is approaching 200 hours. Certification is expected next summer, probably about August, and Piper hopes to be ready to market the airplane within a year to 16 months.

"The Pocono, with seating for 18 including a crew of two, is the firm's entry into the commuter airline market. It will be among the first airplanes to be designed from scratch as a commuter-type aircraft. 'We have analyzed the mistakes others have made and we believe we have solved most of them,' said Robert Laber, PA-35 project engineer.

"Included among items that Piper believes represent improvements over existing commuter aircraft are the large cargo door, which is standard equipment; baggage space both in the nose and at the rear of the cabin, and the size of the cabin. The cargo door is actually two doors, the standard airstair door plus a cargo door that together give a 6-foot wide opening. Baggage space totals 110 cu. ft. with about half in the nose compartment and half in the cabin.

* * * * *

"Only one prototype has been completed. Workers here are now fashioning sections that will be part of the static test aircraft. And testing of the prototype has reached the point where Piper also is going ahead with some production items.

* * * * *

"The prototype is equipped with piston engines, the new Lycoming T10-720-A1A rated at 520 hp at 2,650 rpm. However, the Pocono almost certainly will have turbine engines later in the program. A stretched version also is in the future plans.

* * * *

"The Lycoming engines used on the Pocono are going through a testing program and are expected to receive FAA certification later this winter.

"The marketing program for the Pocono has not been developed. Since the airplane is designed for a different market than most Piper aircraft, it probably will be sold through a factory-controlled distribution system."

187. [Proposed by Chris-Craft] A Piper news release dated November 14, 1968 stated, in part, as follows:

> "Piper Aircraft Corporation has chosen Lakeland as the site for a $2 million manufacturing plant to build a new 18-place airliner, it was announced here today by Howard Piper, executive vice president of the company.
>
> "The plant will contain over 100,000 square feet of floor space for assembly, paint and plastics operations and offices required for the manufacture of the PA-35 Pocono. Piper's new facility will be constructed on 100 acres adjoining Lakeland Municipal Airport, with another 100 acres under option. Initial employment when the plant commences production next summer will be from 200 to 250 persons.
>
> "Piper's Lakeland operations will at first be confined to final assembly of the $200,000 twin-engine Pocono presently in flight test at the company's Vero Beach Research Center. Engineering, tooling and fabrication of component parts will be accomplished in Vero Beach with shipment to Lakeland for final assembly. The 230 MPH plane was specifically designed for commuter airlines, cargo and mail service. It also offers excellent potential for corporate flying in an executive configuration."

188. [Proposed by Chris-Craft] A memorandum dated December 3, 1968 entitled "Some Impressions of the Beech 99 and Comparison with the PA-35", from Trevor Linton-Smith, a Piper engineer located at Vero Beach, to Howard Piper, comparing the Beech 99, a turbo-prop aircraft, with the piston-powered Pocono, included the following conclusions:

"IN CONCLUSION

1. The Beech 99 is an impressive airplane.

2. The airplane is deficient in that the passenger seating is very cramped and the baggage space is definitely marginal.

3. The flying qualities are generally very good.

4. The airplane is fast and quiet.

5. The airframe is wedded to a powerplant with an established reputation and proven reliability.

6. Irrespective of what we say or what Lycoming says about the TIO-720 at 520 H.P. the sophisticated buyers in the third level business will make up their own minds on the reliability of the engine." (emphasis in original) (at page 8)

This memorandum also recognized that the Beech 99 was priced at $365,000 and the PA-35 was intended to be priced at $200,000.

189. [Proposed by Chris-Craft] A memorandum dated December 17, 1968 prepared by ~~the Pocono~~ a senior project engineer at Vero Beech entitled "Powerplants - PA-35" states the following:

> "It is generally agreed that the Pocono will have a turbo-prop version in the future. When and how to instigate a turbo-prop version into the overall program seemed to be the major problems involved in our recent discussion. Also, what delay would be incurred upon the program seems to be a strong factor.
>
> The following suggestions and facts are offered for consideration during this period of uncertainty:
>
> 1. For insurance purposes, I feel that the least we should do is to make a concentrated effort to run a parallel turbo-prop powerplant program in event Lycoming is not able to come up with the certified 520 HP engines in time. The cost of failing to get the Lycoming engines in time is too high when we consider the delayed sales consequences.
>
> 2. Generally, when a new powerplant installation is considered, several thousand man-hours come to mind. Inasmuch as the cabin would have to extend about 18" forward for c.g. purposes, it moves the engine out of the wing interference area. Consequently, it is believed that the major portion of the lines and cowl development would be eliminated by using the Navajo package. The job then becomes as the aft nacelle only. This could present a new ball game if Lock Haven has good data.

3. It might even be advisable to go turbo-prop sooner and advise Lycoming to inform us when the 520 HP engines are certificated and install them on #1, putting turbos on #2 flying model. The piston and turbo fuselages could be common if we chose it to be.

4. There was some question of capability of current personnel regarding turbo-props. There are several persons in the current Engineering Department well versed in turbo-props. Combine them with the help from Pratt and Whitney and we have no problems here. (emphasis in original)

Your comments will be appreciated."

190A. [Proposed by Piper] On or about January 8, 1969, Lycoming sent Piper Avco Lycoming Specification No. 2390 entitled "Tentative Detail Specification for Engine, Aircraft, Model T10-720-B1A 520 Horsepower Turbocharged Direct Drive", bearing the stamp "Advance Jan 8 1969 Copy." That specification listed the rated maximum continuous horsepower as 520 at 2,650 RPM. The specification was not complete in all respects, including the absence of an FAA Type Certificate number.

190A-1. [Proposed by Chris-Craft] At the time of the preparation of the Avco specification identified in Finding 190A, or at any time prior to the letter referred to in Finding 202, Avco had not produced a model T10-720-B1A engine that met the specification of "Rated Max. Cont. Horsepower @ RPM - Altitude 520 @ 2650."

191. [Proposed by Chris-Craft] A Piper news release captioned "For Release Special to Business and Commercial Aviation" for inclusion in its January 1969 issue with the Pocono appearing on its cover, which release was entitled "The Pocono Concept", stated, in part, as follows:

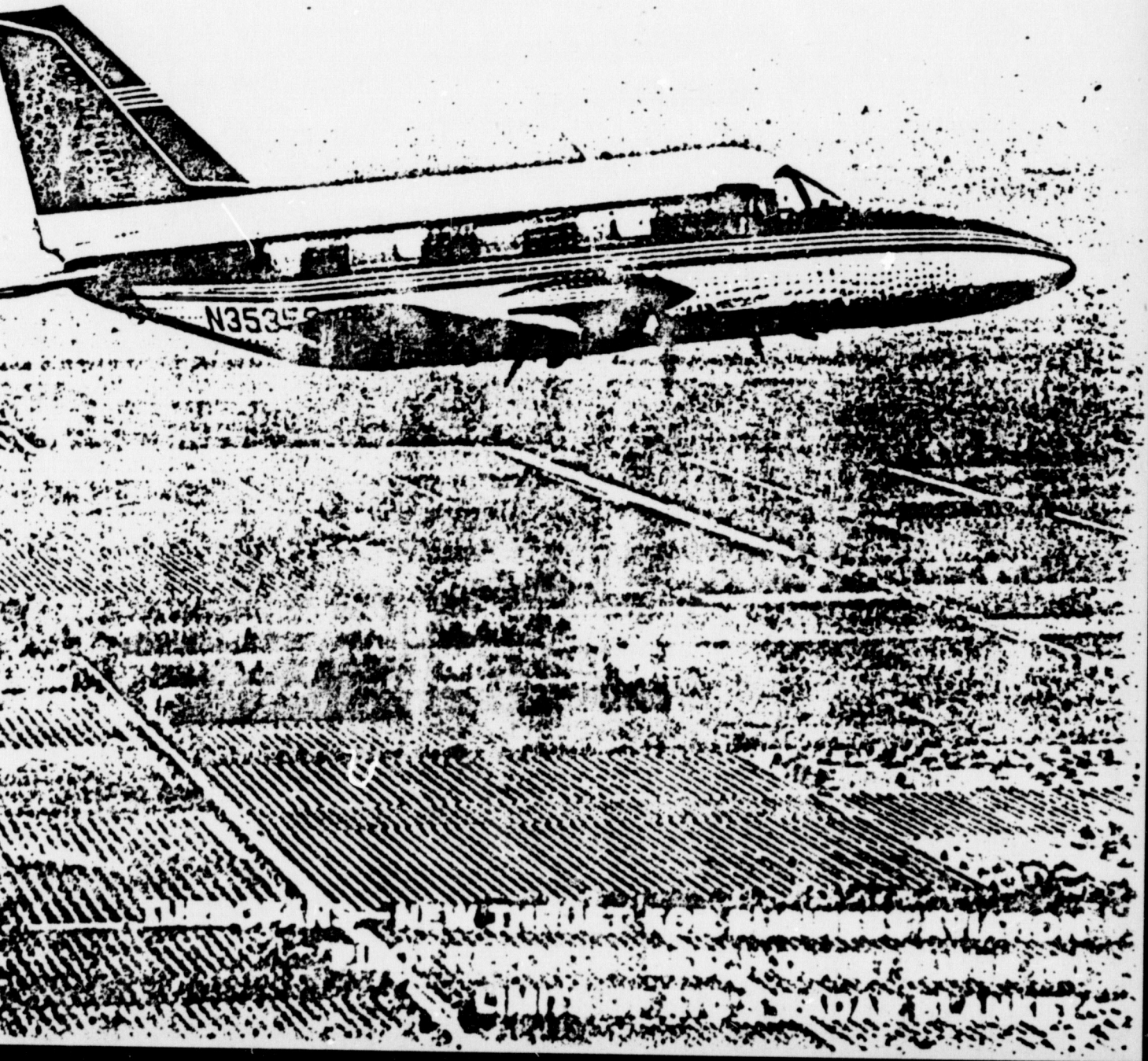
> "The reciprocating engines being used are Lycoming TIO-720's, with a maximum continuous rating of 520 H.P. at 2,650 RPM. One hundred percent power can be maintained to about 12,000 feet, and 75 percent cruising power to 18,000-20,000 feet. This provides considerably improved performance at high altitude fields and in hot climate conditions.
>
> "In a market study operators expressed a desire for many different types of power plants, but the one big desire was for the lowest practical seat cost. We believe the Pocono, with its combined airframe/power plant design, provides this.
>
> "The PA-35 design should significantly affect the development and efficiency of the expanding short haul passenger and cargo routes."

The January 1969 issue of Business and Commercial Aviation contained the following statement in reference to the attached photograph of the Pocono appearing on its cover:

> "COVER: The Pocono, Piper's 16-passenger answer to the need for commuter air transport, is flight tested over flatland citrus groves of South Florida. Wool tufts dotting wings, fuselage and nacelles reveal air flow patterns to pinpoint areas of high drag. The 9500-lb Pocono, powered by eight-cylinder, 550-hp Lycoming TIO-720 engines, will cost 'under $200,000' when delivered in 1970. Piper is developing the Pocono at Vero Beach, but will build a new plant at Lakeland, Fla. for its production."

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192. [Proposed by Chris-Craft] A Piper undated memorandum marked "Working Copy" entitled "PA-35 Review" made the following recommendations.

"RECOMMENDATIONS

Based on this analysis it appears we are facing a very serious negative competitive situation. We feel that due to the timing we have missed our intended market and that the market available in the 70's will require a different configuration: ie; turbo props, 20-25 seats. We therefore recommend the following

1) The TIO-720 powered versions of the PA-35 be dropped due to lack of payload and limited customer demand.

2) Work on the PA-35 be continued with PT6A-27 engines and planned airframe capability of 12500 pounds gross.

"This would enable us to move into the market with an aircraft capable of replacing some existing Commuter aircraft and capable of competing effectively with Beech, DeHavilland and Fairchild for the new business. With an airframe capable of 12,500 pound we could move ahead of competition when power to carry the 12,500 pounds is available.

"If this is the direction, detailed specifications would need to be prepared for each step."

193. [Proposed by Chris-Craft] Piper's 1968 Annual Report mailed to Piper's shareholders on December 24, December 26, 1968 and early January 1969 contained the following statements with regard to the Pocono:

At page 2:

"A second development has been the growing need for small commuter planes. As the airlines become larger and faster they tend to serve fewer terminals. Of an estimated 10,000 airports in the country today, the scheduled airlines serve fewer than 600. Although the Aztec and Navajo are used widely as air taxis, the engineers at Vero Beach have developed the Pocono with the commuter market specifically in mind. The Pocono will seat from 12 to 18 persons, and is especially designed with large cargo doors and ample cubic capacity to be equally useful for cargo as well as passengers. The Pocono is currently undergoing flight tests at Vero Beach and first deliveries should be made sometime during the 1970 fiscal year."

At page 4:

"Below, Piper's Pocono, sleek 18-place experimental mini-liner being tested for the hustling commuter airline and cargo markets."

* * *

"Largest aircraft ever built by Piper, the 18 passenger Pocono took off for the first time in May at Vero Beach. Specifically designed to capture a large share of the rapidly growing third level commuter air service market.

"Lakeland, Florida was chosen as site of new $2,000,000 manufacturing plant to build the

Pocono. The 100,000 square foot building will be constructed on 100 acres adjoining Lakeland Municipal Airport."

At page 9 under the heading "Research":

"* * * The Pocono, an 18-place commuter airliner, also has been a major project, as has been the development of additional new models to be introduced further in the future.

"The Pocono, which will serve as an intermediate sized cargo plane as well as a small airliner and corporate plane, shows promise of giving Piper a favored position in a new, rapidly developing segment of the market, which will add new volume and not merely replace one model group with another. Penetration of the market is expected to strengthen the overall organization and open the way for further advances into the smaller general aircraft market."

Chris-Craft had not seen a copy of the 1968 annual report at the time it commenced its purchases of Piper stock. It obtained such annual report no later than January 15, 1969.

ALC

195. [Proposed by Chris-Craft] A draft memorandum prepared by Mr. Stickley dated February 4, 1969 entitled "PA-35 Program" stated, in part, as follows:

> "Several events have occurred recently which ~~illustrate~~ can serve to highlight some problems that we have with the PA-35 program. (changes in original)
>
> * * *
>
> "3. In our meetings with Grumman officials, we found ourselves unable to supply satisfactory answers to questions about the 'economics' of this program.
>
> * * *
>
> "Item # 3 above I believe simply emphasizes and adds to the seriousness of our Pocono planning problems. The preliminary pricing study which John Keeson prepared nearly a year ago is so far out of kilter that it ~~could~~ would not serve as a reasonable estimate of the economics of this program today. In any serious merger discussions with Grumman or any other firm, it is going to be extremely important that we are able to present ourselves as in firm control of this projected investment. This means that we are going to have to give figures and other answers that hang together well, and the figures are going to have to be based on assumptions that are or will prove to be reasonably accurate.

No final version of this memorandum was prepared by Mr. Stickley and the draft quoted above was located only in Mr. Stickley's file.

195A. [Proposed by Piper] A letter dated February 6, 1969 from Lycoming to Piper included the following:

> "Performance and fuel flow curves are still not available for the T10-720-B1A. Information to construct these curves will be obtained on two engines now being assembled and scheduled for delivery in early March."

A copy of said letter in Piper's files contains the following handwritten notes:

"Meeting 2-10-69

"Lycoming to beef up t/c brackets
Harness to be checked on 520 install.
Engine Spec by Feb 10.
T.C. by Sept 15.
Use 2 hole metering plug - if still torching, AML engines arrive Mar 5, 15, Apr. 26, May 7
Return 470's by Mar 22."

196. [Proposed by Chris-Craft] A memorandum dated February 28, 1969 by a senior project engineer on the Pocono project in Vero Beach entitled "PA-35 Engine Study Considerations", includes the following statements:

> "It appears that we are now at the crossroads and input from all areas should be fed into the mill for evaluation. It is possible that all of the following information is known and under consideration. If so, this memo can be ignored:
>
> 1. As I see it, we must evaluate the 500-hp piston engines as soon as we can, to determine if we can still handle a gross weight of about 9,750 pounds. This will be done in the fastest manner possible, utilizing old and new cowl parts as required to expedite. We only need the one critical engine and after installation, should be able to go directly to the problem (single engine climb at 5,000 ft).
>
> a. If the 500-hp gets us the 9,750 pounds gross weight we've been assuming (or close to it) we will have a reasonably salable interim aircraft. It would also be the fastest means of getting us into the market.
>
> b. If the gross weight has to be reduced an appreciable amount as the result of getting only 500 hp, the piston engine approach would then be unacceptable.
>
> We are then left with the turbo-prop approach."

196A. [Proposed by Piper] The balance of the memorandum described in Finding 196 continued as follows:

"At least two important logical possibilities exist:

1. Turbines applied to the current airframe--modifying only as necessary. A cursory look indicates an 18-20 inch extension on the forward end of the cabin, additional tankage in the outboard wing and an increase in gross weight to 11,000 pounds. I pick 11,000 pounds for good reasons. It happens to be the weight for which our current landing gear program is set up, and revision to that program is expensive and time consuming. Also, it is felt that 11,000 pounds is about the gross weight to which our current airframe could be upgraded before the "straw that breaks the camel's back" condition shows up. The aircraft started at 8,700 pounds gross weight. However, during the design process, it was changed accordingly with an eye on 10,000 pounds. I have heard statements to the effect that the aircraft was designed for 8,700 pounds and we hoped to get 9,750 pounds. This is not true. Our structural jump would be from 10,000 pounds to 11,000 pounds, not 8,700 pounds to 11,000 pounds. Finally, a cursory look at the payload capabilities indicates the following: The weight increase from 9,750 pounds to 11,000 pounds would be used up in fuel. However, I cannot conceive how the decrease of 600 pounds in empty weight, due to the power plant change, could come close to being eaten up by the increased structural weight required to go from 10,000

pounds to 11,000 pounds. Therefore, our payload should be equivalent or better than the 9,750 pounds current Pocono. The elapsed time to apply the turbines to the current airframe (increased to 11,000 gross weight) would be much shorter than to a gross weight of much over that.

2. Turbines applied to a new family of airplanes at 12,500 gross weight (20 or more passengers). This defines a new and promising airplane and probably should be a long range goal. It would be about 3 feet longer and does, however, spell out a completely new structural ballgame. It seems a logical consideration if the piston aircraft is successful, but would be so long in development that it would be ineffective on the current market.

Other considerations:

a. If the piston version is successful, it is recommended that the stabilator remain as is and we develop a new vertical tail as determined by flight test.

b. If turbines are a necessity (current or stretched version) it is recommended that we consider a stabilizer and elevator located about halfway up on the vertical tail to effectively improve the longitudinal stability and power effect on the horizontal tail.

c. If we use the PT6-27 engine, it is recommended that we attempt to utilize the entire Navajo turbine cowling to shorten our lead time.

d. Last, let's not forget to capitalize on the P & W offer to furnish at least 2 engineers during the first PT6 installations.

Revised 12/14/70 **627A** KLC

197. [Proposed by Chris-Craft] A memorandum dated March 31, 1969 entitled "PA-35 Single Engine Performance" by H. W. Barnhouse, a Piper test pilot, stated as follows:

ingle engine climb evaluation of the PA-35 with the TIO-720-B1A engine (S/N L-745X) inlled in the right hand nacelle has been completed. In the Lycoming test cell this engine duced 506 BHP with 47" hg manifold pressure at 2650 rpm under sea level conditions.

gle engine climbs were performed at three gross weights, 9750 lb., 9000 lb., and 8200 lb.. h weight was checked at 5000' density altitude and at 10,000'. At 5000' the manifold ssure indication was about 1½" hg below the test cell indication (equal to approximately HP power loss) and at 10,000' the indication was about 5" hg below test cell indication.

ing the climb test the right hand alternator was loaded to 72 amps and the engine driven ssure pump was loaded to 10½ psi. These two accessory loads represent the maximum icipated service loads which must be applied during performance determination according the special regulations.

rate of climb obtained at 5000' at 9750 lb. gross weight was 127 fpm. The required rate climb is 155 fpm. An additional 20 BHP increases the rate of climb by a calculated 50 fpm erefore, when 520 BHP is available we should meet climb requirements at 9750 lb. gross ght with a slight pad.

er the climb testing was finished, a full throttle climb from 3000' through 15,000' ified that test cell manifold pressures were not being obtained on the airplane at higher itudes. Investigation revealed that the flexible line from the intake manifold to the ifold pressure gage had a small hole burned through it. The line was replaced, fire eved, and the climb through 15,000' repeated. Manifold pressures were nearer test cell ssures, but still lagging above 5000'. This leak in the line may or may not have affected ine power output. Consequently a repeat of the 9750 lb. gross weight data will be made.

Conclusion:

The single engine climb rate requirement at 5000' density altitude can be met at 9750 lb. gross weight with 520 BHP.

With an engine that will hold 520 BHP to its critical altitude, the single engine service ceiling (50 fpm) will be over 10,500' density at 9750 lb. gross weight (see attached plot).

Further tests are under way to check the effects of the induction leak mentioned above. The 5000' rate of climb will be verified and the 10,000' rate re-determined in order to pred t service ceiling more accurately.

ACL

628A

A letter dated April 1, 1969 from R. C. Scott, Piper's Assistant Chief Engineer in Vero Beach, to Avco Lycoming stated:

> "As discussed on the telephone with Mr. Pfleegor today, we are no longer interested in using the second engine which was being prepared for immediate Flight Test work on the Pocono. Since the engine will not deliver a full 520 rated horsepower, we definitely want to have you convert that engine along with the first engine to the full 520 horsepower rating. It is our understanding that this will be accomplished, at least in the first case, by approximately mid May."

197A. [Proposed by Piper] On April 3, 1969, Piper sent the following letter to Lycoming (attached).

On April 18, 1969, Lycoming answered the foregoing letter as follows (attached).

630 A'

DEVELOPMENT CENTER

Piper Aircraft Corporation

MORE PEOPLE HAVE BOUGHT PIPERS THAN ANY OTHER PLANE

Vero Beach, Florida 32960
(305) 567-4361

April 3, 1969

Mr. Cliff Pfleegor
Avco-Lycoming
Williamsport, Pennsylvania 17701

Dear Cliff:

As you are aware, the rated 520 h.p. TIO-720 will be required for the Pocono. To complete our overall planning and schedule, we urgently need the following information from you, as well as follow-up and/or changes in your schedule or estimates.

1. What is your estimated critical altitude? (Maintaining 520 h.p.).

2. When do you expect our #1 and 2, then our #3 and 4 520 h.p. engines to be delivered?

3. Which engine will be instrumented for your testing, and how long do you estimate that Lycoming will need the aircraft to complete in flight torsionals, flange bending, detonation survey, and get the controllers tailored to maintain h.p. to critical altitude? Can this be done in Vero Beach, or Williamsport?

4. Can Hartzell in flight blade stresses be run in conjunction with your tests, if coordinated?

5. The .72 B.S.F.C. with minimum 30 P.S.I. at 520 h.p. is approaching the limit of our presently designed fuel system. Can the B.S.F.C. or the P.S.I. be lowered? Is there any chance of either being higher?

6. After completion of the above, what would your Type Certificate schedule be?

Your best estimates and any other pertinent information on the above will be appreciated, at your earliest convenience.

Sincerely,

PIPER AIRCRAFT CORPORATION

Ward Evans

Ward Evans
Design Engineer

WE:bbm

cc: R. Scott, W. Burgess, R. Laber, I. J. Anderson (Lycoming)

AVCO LYCOMING DIVISION
WILLIAMSPORT, PENNSYLVANIA 17701, TELEPHONE (717) 323-6101

631 A

APRIL 18, 1969

ONLY COPY AVAILABLE

PIPER AIRCRAFT CORPORATION
VERO BEACH, FLORIDA 32960

ATTENTION: MR. WARD EVANS
DESIGN ENGINEER

DEAR WARD:

IN RESPONSE TO YOUR LETTER OF APRIL 3, 1969 CONCERNING THE 520 HP T10-720, THE FOLLOWING ANSWERS ARE IN THE SAME ORDER AS THE QUESTIONS WERE ASKED:

1. THE ESTIMATED CRITICAL ALTITUDE FOR 520 HP IS 12,000 FT. T.L.S

2. THE DELIVERY DATE FOR YOUR FIRST 520 HP ENGINE IS JUNE 5, 1969, NUMBER TWO TO FOLLOW 10 DAYS LATER. NUMBER THREE WILL BE ABOUT 10 DAYS AFTER NUMBER TWO AND NUMBER FOUR A WEEK LATER. R.H.L

3. WE WILL BUILD AN ENGINE FOR OUR TESTING AT THE SAME TIME AS WE BUILD YOUR FIRST ENGINE. IT IS ESTIMATED THAT TO CONDUCT THE IN-FLIGHT TESTS, SUCH AS DETONATION, TORSIONALS, TURBINE SPEED, AND TAILORING THE CONTROLLERS TO MAINTAIN HORSEPOWER TO CRITICAL ALTITUDE, WILL TAKE APPROXIMATELY EIGHT WEEKS. TO EXPEDITE THE PROGRAM IT WOULD BE DESIRABLE TO CONDUCT THIS TESTING AT WILLIAMSPORT.

4. YES, THE IN-FLIGHT BLADE STRESSES CAN BE RUN IN CONJUNCTION WITH OUR TEST AND IN FACT, TIMEWISE, WOULD BE DESIRABLE. ALSO THE PROXIMITY OF HARTZELL TO LYCOMING IS ONE MORE REASON WHY IT WOULD BE DESIRABLE TO CONDUCT THE TESTS AT WILLIAMSPORT. A.R.R. HARTZ

5. PRESENT INDICATIONS ARE THAT THE .72 B.S.F.C. WITH A MINIMUM OF 30 PSI FUEL DELIVERY PRESSURE WILL REMAIN THE SAME UNLESS YOU FIND YOU CAN COOL THE ENGINE WITH A LOWER B.S.F.C. IT DOES NOT APPEAR AT THIS TIME THAT EITHER WILL BE RAISED. EVANS - RUN FUE FLOW TE ON MECK

632 A

DATE

Lycoming
.....Avco .....

PAGE

APRIL 18, 1969

PIPER AIRCRAFT CORPORATION
VERO BEACH, FLORIDA 32960

2.

ATTN: MR. WARD EVANS
DESIGN ENGINEER

6. THE TARGET DATE FOR TYPE CERTIFICATION OF THE ENGINE IS OCTOBER 1, 1969.

IT IS HOPED THAT THIS IS THE INFORMATION YOU REQUIRE AND IF NOT CALL US. BE ASSURED THAT WE ARE MAKING EVERY EFFORT TO EXPEDITE THE PROGRAM AND WILL BE GLAD TO ASSIST YOU AT ANY TIME YOU FEEL IT IS NECESSARY.

VERY TRULY YOURS,

AVCO LYCOMING DIVISION
AVCO CORPORATION

C. A. PFLEEGOR, MANAGER
INSTALLATION ENGINEERING

CAP:HM
Cc: MESSRS. F. W. RIDDELL, L. J. ANDERSON

ZEROX -
F. WEICK
B. SCOTT
E. CASWELL
W. BURGESS
B. BARNHOUSE
B. LAGER

197B. [Proposed by Piper] A memorandum dated April 24, 1969, Subject "NOTES ON LYCOMING MEETING ON 4-22-69 WITH THE FOLLOWING PERSONS PRESENT:" from W. Burgess, a Piper engineer, to R. Scott included the following:

"PA-35 T10-720 ENGINE INSTALLATION

"a. Lycoming indicated they would have to T.C. the engine by October 1 in order for us to meet our T.C. date. Any engine changes should be made known to Lycoming as soon as possible.

"R. Scott indicated T.C. date changes may be in order. Will let Lycoming know within next month.

* * * * *

"d. Discussion of recent problem with the latest right engine indicates that oil pressure will be improved through larger lines. Also a longer oil filter will be used. Will check filter clearance. A higher capacity pump is available if needed and will be decided upon during test cell operation of the 520 HP. The heavy oil consumption, presently 1-1/2 qts. per hour, will be looked into by Lycoming."

198. [Proposed by Chris-Craft] On May 28, 1969 a report entitled "PA-35 Forecast Marketing/Sales Organizations" was submitted to the Piper Corporate Planning Committee. The covering memorandum dated May 28, 1969 for this report stated as follows:

> "The attached report is an analysis and summary of the potential for sales of the PA-35 based on assumptions which appear to be realistic in light of the information available.
>
> "This represents the findings of Market Research and has been reviewed by both Domestic and International Sales. They concur with these findings.
>
> "The analysis clearly indicates a changing market and that our present 9750 pound airplane represented by piston power is experiencing a decreasing requirement. A larger airplane in the 12,500 pound class which would need turbo-prop power will be required to meet the markets. We recommend concentration on the development of the turbo-prop version of this airplane.
>
> "We further recommend a review of priorities of this development in terms of total man hours and calendar time involved as compared to the many short range developments started but never completed."

The report stated as follows at pages 1 and 2:

> "It has been some time since any complete review of markets for the PA-35. During this time there have been several surveys and studies which have added to our information and have pointed out definite trends in some of the Domestic Markets. For information purposes, the following is a list of data sources available.

DLC

(a) Arthur D. Little Study - 1967

(b) Marketing Research Survey - 1969
Final Report - MR #1-69

(c) International Study - 1968
Final Report - MR #1-68

(d) FAA Surveys 1966, 1967, 1968

(e) Flight Magazine Surveys 1967, 1968

(f) Sales Organizations

While the above provides an excellent data base, the information must be tempered in light of the parameters used in each study. In the Arthur D. Little Study and the International Study, responses were based on delivery of a piston powered PA-35 sometime in 1969 at a price of $200,000 'equipped'. 'Equipped' was never defined in detail.

In the survey conducted this year, operators were not given any information on delivery and price and their responses were based on their own knowledge of our progress or what they have heard from unofficial sources. We have not released revised data to the public. In other words all the study responses are based on parameters which do not appear practical at this time.

In this report each market will be analyzed based on the best information available. Because of the strong demand for Turboprops, there are two forecasts.

1. A forecast of total PA-35 sales based on availability of a piston aircraft for customer delivery in January, 1971 at no more than $225,000 equipped - with Turboprop version available in January, 1972 at $[illegible]00,000.

NL

2. Sales forecast assuming a decision to build Turboprops only with aircraft available for customer delivery January, 1972.

A section of said report entitled "Scheduled 3rd Level-Commuter" included the following statement:

> "While the number of scheduled operators has continued to show substantial growth, most knowledgeable parties have been predicting a leveling off or decline in the total. These predictions are based on the fact that few, if any, operators are making a profit and that mergers and combinations would be the natural result leading to fewer, larger firms with better capitalization and profit potential. This trend is already beginning - three mergers were announced in April which will reduce seven (7) large operators to three - and more are expected.
>
> "If, in fact, the long range trend is to fewer large operators, there is little chance of much success with a piston powered airplane in the over 15 place category. The Arthur D. Little Study indicated 50% of the scheduled operators preferred Turbcprops in 1967 and predicted this percentage would increase. Our 1969 study with 58 large operators showed a 78% preference for Turboprops.
>
> "The character of the market has changed during the last year. Prior to 1968, most of the third level operators expressed a desire for freedom to operate anywhere without route regulation of any kind. Recently, however, the larger operators are asking for route protection to help protect their investments which are considerably larger with turbine equipment. The larger operators are trying to establish an airline image and in this regard they feel turbine power is most desirable." (at page 4)

At pages 11 and 12, the memorandum stated:

> "Assuming most of the DeHavilland Herons in use today will be replaced, we estimate 40 of the 44 over 15 place recips. in 1973 will be PA-35's. Allowing for turnover and attrition it is estimated that potentially 45 units could be sold into this market 1971-1973. After introduction of our Turboprop it is unlikely that any more piston PA-35's would be required in the U.S. Commuter market.
>
> "The PA-35T coming in 1973 will be very competitive (except for pressurization) and should be able to capture 25% of the available market. This indicates a potential for 50 to 55 units in new sales. There will also be a replacement market for older b 99's and Twin Otters which should afford a potential for another 30 units.
>
> "If the piston version were eliminated and the Turboprop PA-35 available in January, 1972 - it's safe to assume that at least some of those who would buy the piston version would decide to buy the PA-35T since they would have no piston alternative.
>
> "The PA-35T would be competing in a market which will take over 450 new aircraft (16-25 seats) between 1970 and 1976. There is evidence that the PA-35T will be very competitive in all respects to known competition and on this basis should be able to capture 25% of the available market. This would mean a forecast of 110 PA-35T's with this approach. Replacements would add another 20. (emphasis in original)

A section entitled "Location Service Airlines" stated:

"Local service airlines have shown a consistent interest in small aircraft to service low density routes. To date, Airwest, Frontier and Allegheny Airlines have taken positive action; however, we have had increasing interest from other local service carriers and there is every reason to believe that several of them may buy small aircraft for this purpose.

"It is possible that a combination of a good sales presentation, full service support, and the superior airframe of the PA-35 may lead to some sales of piston powered equipment to this market. However, all of the local service carriers contacted thus far have expressed a preference for Turboprops and it seems more likely that they will move in the direction of Turboprops particularly if our piston powered version is not available until 1971. (emphasis in original)

"Based on our knowledge to date, we must assume that the betting odds are very poor that any will buy the piston powered PA-35.

"On the other hand the PA-35T should be ideal for this market and we can easily predict sales of 15 to 30 aircraft depending on timing."

A section entitled "Cargo Carriers" stated as follows:

"This is an area where we do not have enough information to make a reasonably accurate evaluation of the market potential. We know that several cargo carriers have visited Vero Beach and discussed the PA-35 and have expressed interest in the airframe. The useful load which we are able to project right now for the piston powered version makes it a very doubtful item while the Turboprop version, with a substantially greater useful load should be ideal for cargo work. On this basis, with little information to work on, we can merely make an estimate that we may sell possibly as many as 10 piston powered aircraft into this market but that the potential for the Turboprop would be greater." (at page 13)

A section entitled "Corporate" read as follows:

> "This is another area where we do not have very much information; however, there have been some parties expressing interest in the PA-35 because of cabin size. In this market, useful load would not be a problem, however, the piston powered PA-35 does not seem to be the kind of aircraft which would fit a normal corporate image except in those situations where a corporation has large numbers of people to transport over relatively short distances.
>
> "With the availability of pressurization in the Metro and Jetstream, it is likely that the demand for a large unpressurized airplane will decrease. There appears to be limited potential in the market." (at page 13)

A section entitled "Review of PA-35 Potential - International" included the following statement:

> "In 1968 the Marketing Research Department conducted a study of International operators to develop information on the potential for the PA-35. In most of the areas, Regional and District Managers were asked to conduct personal interviews with 15 to 20 of the key operators in their area. They were provided with prepared questionnaires and instructed in the techniques of conducting the interview. Additionally, Nyge-Aero and C.S.E. were asked to do the same in their areas in as much as it was difficult to get someone into their area for that purpose.
>
> "Again the parameters of the study were such that the information is now questionable. In order to make the information compatible with the Arthur D. Little Study, a delivery date of 1969 was used and a price of $200,000 equipped for the piston version. The forecast period was to cover 1969 thru 1972. Based on the results of the study which were inconclusive in

some of the areas, we made an estimate that there was a market for 120 aircraft or a probable 40 per year from 1970-1972. However, a great majority of the operators contacted indicated that timing was a very critical factor in their purchase decision and there is little question that some of these have already committed to other aircraft or will commit before we can get our airplane to market. Additionally, nearly 40% of the operators indicated they would prefer Turboprop power as opposed to Piston power on the PA-35. Nevertheless, they did indicate some interest in the Piston version." (at page 14)

* * *

"With this limited information, forecasting the international markets is difficult, however, it is safe to assume that the trend toward Turboprops will probably continue to increase as it has in this country. The potential has been discussed with the sales organization and based on the knowledge at hand, we feel there is a potential market for the PA-35 of perhaps 65 piston powered airplanes and 100 turbine powered based on the schedule assume in forecast #1. If we were to drop the piston version and produce only the Turboprop, it's probable we would sell more total airplanes and would have a market for about 200 with sales volume running about 40 per year." (at page 16)

199. [Proposed by Chris-Craft] A handwritten memorandum dated June 13, 1969 from Ward Evans, a Piper design engineer at Vero Beach, includes the following statement:

> "Since installation of TIO-720 S/N L-745X in March, oil consumption has increased to over 2qts/hr, and flight test data indicates a performance deterioration. We think this is from a power loss, but all performance data substantiation could only be verified by Lycoming installing this engine As Is (no plug change, timing, etc.) in a test cell, and giving us positive verification of results.
>
> * * *
>
> "This is similar (some items deleted) to their previous runs #243 & 248, on Mar. 4, 1969, on this engine. We also would like a report on tear-down defects noted.
>
> "Think Lyc. should be advised of this request ASAP so they can schedule test cell without interfering with our #2."

A copy of the aforesaid memorandum dated June 13, 1969 contains the additiona handwritten note:

> "Everett,
>
> Our management should get on top of this both by telephone & letter before Lyc has their schedule firm on the returned engine."

ACC

200. [Proposed by Chris-Craft] Bangor Punta's preliminary prospectus dated May 29, 1969 and final prospectus dated July 18, 1969, under "Research and Development" stated:

> "* * * The Pocono, an 18-place commuter airliner, is a major project currently in the development program."

Neither prospectus contained any additional statements concerning the Pocono.

Under the May 8, 1969 agreement described in Finding 66, the Piper family agreed to:

> "* * * cooperate with Bangor Punta in making the Exchange Offer and obtaining any governmental approval appropriate in connection with the making of the Exchange Offer and in connection with the issuance of the Bangor Punta securities issuable as part of such offer. . . ."
>
> * * *
>
> "* * * Sellers will indemnify and hold harmless Bangor Punta, each of its directors, each of its officers and each person, if any, who controls Bangor Punta within the meaning of Section 15 of the Securities Act of 1933 against any losses, claims, damages or liabilities (and actions in respect thereof) to which Bangor Punta or any such director, officer or controlling person may become subject under the Securities Act of 1933 or otherwise by reason of any untrue statement or alleged untrue statement of any material fact contained in any such Registration Statement, the Prospectus, any related preliminary prospectus or any amendment or

supplement thereto, or by reason of the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in reliance upon and in conformity with written information furnished to Bangor Punta by or on behalf of Sellers or Piper specifically for use therein; and Sellers will reimburse any legal or other expenses reasonably incurred by Bangor Punta or any such director, officer or controlling person in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that Sellers shall not have any such liability to the extent that any such loss, claim, damage or liability arises out of or is based upon the use by Bangor Punta of any preliminary prospectus after a final Prospectus shall be available for use or the use by Bangor Punta of any Prospectus not reflecting an amendment or supplement thereto after the Prospectus reflecting such amendment or supplement becomes available for use by Bangor Punta."

Chris-Craft's final prospectus dated July 24, 1969 contained the same statement as the Bangor Punta prospectus quoted above. At page 33 of the Chris-Craft final prospectus it stated:

HISTORY, BUSINESS AND PROPERTY OF PIPER

Chris-Craft has requested information from Piper for use in connection with this Prospectus, but Piper has not supplied any information pursuant to such request. Two directors of Chris-Craft have been elected to the Piper Board of Directors. The information and financial material relating to Piper in this Prospectus was taken from the Bangor Punta prospectus dated July 18, 1969, and purporting to be furnished by Piper for inclusion therein. It should be noted that the Securities and Exchange Commission does not approve or disapprove or pass upon the accuracy or adequacy of such information. Chris-Craft is not aware of any inaccuracy in or incompleteness of the information concerning Piper or its industry contained herein; however, Chris-Craft cannot take responsibility for the accuracy or completeness of such information or the fact that no events, unknown to Chris-Craft, have occurred which would affect the significance or accuracy of such information. The decision of Piper's stockholders in determining whether or not to accept the Exchange Offer must be made without the benefit of information which may be material in making such decision.

Chris-Craft's prospectus dated May 19, 1969 stated as follows regarding the Pocono:

> "* * * The Pocono, Piper's commuter airplane, also has been a major project as has been the development of additional new models to be introduced further in the future. The Pocono will serve as an intermediate sized cargo plane as well as a small airliner and corporate plane, and Piper has stated that it shows promise of giving Piper a good position in a new, rapidly developing segment of the market, which will add new volume and not merely replace one model group with another. Penetration of the market is expected to strengthen the overall organization and open the door for further advances into the smaller general aviation market."

Preceding its description of Piper, Chris-Craft stated at page 33 of its prospectus:

HISTORY, BUSINESS AND PROPERTY OF PIPER

Chris-Craft has requested information from Piper for use in connection with this Prospectus, but Piper has not supplied any information pursuant to such request. Two directors of Chris-Craft have been elected to the Piper Board of Directors. The information and financial material relating to Piper in this Prospectus are based on information released publicly by Piper or filed by it with various public agencies. Such agencies do not approve or disapprove or pass upon the accuracy or adequacy of such information. Consequently, Chris-Craft cannot take responsibility for the information concerning Piper or its industry contained in the Prospectus or its accuracy or completeness or the fact that no events, known to Chris-Craft, have occurred which would affect the significance or accuracy of such information. The decision of Piper's stockholders in determining whether or not to accept the Exchange Offer must be made without the benefit of information which may be material in making such decision. Among the information missing regarding Piper is a current description of its business, properties and products, including relative contributions to sales and profits and the nature of Piper's competition.

The information set forth below under the subheading "History" has been taken from Piper's Prospectus dated May 24, 1960, and all other information under this heading has been derived from Piper's 1968 Annual Report to Stockholders.

200c. [Proposed by Piper] A Piper memorandum dated June 26, 1969, Subject "STATUS REPORT - PA-35" from R. H. Laber, a Pocono project engineer in Vero Beach, to R. Scott, Assistant Chief Engineer, included the following:

"I. The following status report is based on a comprehensive investigation of the overall PA-35 program as well as a study in detail in the known troublesome areas.

"In order to expedite the program, various types of drawing releases have been used. The first releases are 'R & D Only', then 'Reference' to allow Methods to study the major assemblies, then 'Advance to Methods' at which time the drawings were partially methodized and major tools planned and ordered and finally 'Production Releases'. Therefore, by the time Production drawing releases occur, much of the major tooling is manufactured.

* * * * *

"F. POWERPLANT - The major design/drafting time remaining on the powerplant concerns the engine build-up and installation drawings. There are miscellaneous changes expected as a result of the tapered wing, rerouting of engine controls, etc.

"Design - Close to complete in most areas.

* * * * *

"5. Engines

E-1 - Have one 520 HP in house and 2nd one due in a week. These two engines will not be capable of receiving an air conditioning compressor. New crankcase castings are required for that.

"E-3 - These engines are due August 25 and September 1. However, if we require an air conditioner mounting pad, there will probably be 1 to 2 months delay."

201. [Proposed by Chris-Craft] On July 29, 1969, Piper, through its Vero Beach Plant, issued temporary stop work orders to the following suppliers of equipment for the Pocono: Ozone Aircraft Systems, Inc. (supplier of nose and main landing gear, rotary actuators and flap cylinders) and Romec Division of Lear Siegler, Inc. (suppliers of a power pak).

202. [Proposed by Chris-Craft] A letter dated August 1, 1969 from Avco Lycoming to Mr. R. Scott, Piper's Assistant Chief Engineer in Vero Beach, stated, in part, as follows:

> "We have studied the TIO-720 engine as to performance, weight, and availability of prototype engines as requested in our meeting at Vero Beach, July 22 and 23, 1969 and have come to the following conclusions:
>
> 1). It is inadvisable to rate this engine at 520 H.P. normal rating.
>
> 2) It is possible to rate it at 520 H.P. for emergency single engine operation by type testing at 520 H.P. normal rating.
>
> 3) It is possible to rate it at 520 H.P. take-off for 1, 2, 3, or 5 minutes. * * * From our past experience, we have no reason to believe the engine will not stand this test but in order to dispel all fears, we feel it should be accomplished. This would require type testing at 520 H.P. normal rated power.
>
> 4) In conjunction with Item 3, we would propose that the normal rating of the engine in the aircraft be changed to 470 H.P. for normal climb and is a basis for cruise powers.
>
> * * *
>
> Engines to the configurations indicated in Items 3, 4, and 5 could be provided in six months after go ahead from Piper.
>
> Our confidence in rating the engine in accordance with Items 3, 4, and 5 is such that we have no doubts we can provide an engine of 1000 H.P. TBO. Only experience would tell us if we could go higher."

ALL

204. [Proposed by Chris-Craft] The Pocono project was formally abandoned by Piper during August 1969 at the request of Bangor Punta. The Lakeland plant, 95% completed by September 30, 1969, has remained idle. In the period 1965-1969 Piper incurred development expenses related to the Pocono of $ which were currently charged in the years incurred. In addition, a reserve of $ was set up to cover potential cumulative charges.

1968

KL

TICKER SYMBOL BNK — THOUS SH OUTSTANDING 2152

	VOL	HIGH	LOW	CLOSE
	93	43-1	41-6	42-5
		HOLIDAY		
	83	43-2	42-5	42-6
	51	43	42-3	42-7
	227		4.50	43-6
	34	43-2	42-4	43
	62	¤43-7	42-4	43-1
		HOLIDAY		
	51	43-3	¤42-1	42-1
	33	42-6	42-1	42-2
	180		4.44	43-6
	84	43-6	¤43	43-3
	97	44-6	43-4	44-6
		HOLIDAY		
	272	46-6	45-7	46-5
	167	¤47	46-3	46-7
	620		4.86	44
	108	47-1	46-5	46-5
	137	47-2	46-5	47-1
		HOLIDAY		
	230	¤47-6	¤45-4	46-6
	111	47-4	46-5	47-1
	586		4.89	44-2
	52	¤47-5	46-5	46-5
	84	46-3	45-1	45-5
		HOLIDAY		
	50	45-5	43-4	43-6
	78	44-4	¤42-6	43-1
	264		4.59	44-2
	38	43	¤42-2	42-6
		HOLIDAY		
	80	44-2	43-4	44-1
	67	¤44-4	43-5	44
	29	44-2	43-6	44
	214		4.63	44-2
		HOLIDAY		
	49	44-7	¤44-1	44-3
	54	45-7	44-3	45-7
	95	¤46-3	44-4	44-4
	56	44-7	44-2	44-2
	254		4.62	44-2
	50	44-3	¤43-5	43-6
	32	45-1	43-6	45-1
		HOLIDAY		
X	121	46-7	45-7	46-7
	220	¤48	46-3	47-1
	431		4.86	44-2
	82	46-1	¤44-6	45-6
	72	46-7	45-4	45-4
	120	¤47	46-2	46-3
		HOLIDAY		
	156	46-6	45-6	46-5
	430		4.78	44-3
	170	47-1	¤46	47-1
	59	47-2	46-6	47
		HOLIDAY		
	99	48	47-2	47-4
	227	¤49-4	47-6	48-5
	555		4.86	44
	188	49-2	48-6	49
	279	49-4	48-7	49-1
		HOLIDAY		
	190	49-3	¤48-3	49
	87	¤49-6	48-4	48-5
	744		5.01	44
	148	¤48-2	47-1	47-6
	75	47-3	46-2	46-2
		HOLIDAY		
	101	46-3	¤44-5	45-5
	45	45-7	45-1	45-1
	369		4.68	43-7
	308	¤47-1	45	45-2
	51	45-6	45-1	45-1
		HOLIDAY		
	60	45-7	45	45-2
	76	45-3	¤44-3	44-5
	495		4.74	43-7
	57	45-1	44	44-3
	121	45-4	44-4	44-5

.150 $ 2.32

EARN

DIV

JAN	43146	JUL	6729
FEB	27608	AUG	-
MAR	39C64	SEP	-
APR	26837	OCT	-
MAY	21313	NOV	-
JUN	18878	DEC	-
NOV	-	MAY	-
DEC	-68529	JUN	-
JAN	-	JUL	-
FEB	-	AUG	-280
MAR	-	SEP	-

INTRA DAY

TICKER SYMBOL CCN — THOUS SH OUTSTANDING 1210

	VOL	HIGH	LOW	CLOSE
10/1	36	36-3	35-2	35-4
2		HOLIDAY		
3	26	36-6	36-1	36-1
4	132	37-4	35-7	37-4
	194		3.80	35-2
7	23	37-6	36-6	37
8	226	38-1	36-7	37-5
9		HOLIDAY		
10	47	¤38-2	36-5	36-6
11	31	36-7	¤36-2	36-4
	227		3.87	35-4
14	32	37-2	¤36-5	36-5
15	62	37-3	36-6	37-1
16		HOLIDAY		
17	157	¤38-5	37-3	37-5
18	30	38-3	37-6	38-3
	281		3.92	35-7
21	139	39-3	38-5	39
22	106	¤39-6	38-5	38-5
23		HOLIDAY		
24	51	39-1	¤38-1	38-1
25	52	38-4	38-2	38-3
	348		3.99	36-2
28	65	¤38-5	38-2	38-2
29	53	38-3	38-6	38-6
30		HOLIDAY		
31	78	37-2	36-1	36-5
11/1	353	36-5	¤35-4	35-4
	749		3.85	36-3
4	36	35-7	¤35	35-6
5		HOLIDAY		
6	89	38-1	36-4	37-3
7	37	37-5	37	37-3
8	70	¤38-2	37-2	37-6
	232		3.93	36-5
11		HOLIDAY		
12	108	39-4	38-5	39-1
13	58	¤39-5	38	39
14	27	39	38-5	38-6
15	31	39-1	¤38-4	38-4
	224		4.02	36-6
18	20	38-7	38-2	38-2
19	32	38-7	38-4	38-5
20		HOLIDAY		
21	53	¤39-2	¤38-1	38-5
22	27	38-6	38-1	38-1
	132		4.00	36-7
25	21	38-2	37-1	37-1
26	X 99	38-4	¤37	38-4
27	102	39-3	38-2	39-2
28		HOLIDAY		
29	130	¤41	39-3	41
	552		4.20	37-1
12/2	153	¤41	39-7	40-5
3	36	40-4	39-1	39-1
4		HOLIDAY		
5	72	39-6	¤38-2	39
6	18	39-3	39	39-3
	279		3.99	37-3
9	108	¤41-3	¤39-1	40-1
10	80	41-2	39-7	41-2
11		HOLIDAY		
12	X 168	41-5	39-3	41
13	41	40-6	39-6	40
	397		4.20	37-5
16	63	¤40-6	39-4	39-6
17	39	39-6	¤37-6	38-3
18		HOLIDAY		
19	88	39	37-7	39
20	32	39-1	38	38
	222		4.00	37-7
23	62	38	¤36-3	36-3
24	46	38-3	36-4	38-3
25		HOLIDAY		
26	25	39-1	38	39
27	47	¤39-6	38-6	39
	180		4.09	37-7
30	47	39-7	38-2	38-4
31	58	39-3	38-7	39-2

.250 $ 1.89
1.875FOR X-RIGHTS

JAN	-	JUL	13918
FEB	-	AUG	25841
MAR	-	SEP	45232
APR	-	OCT	19690
MAY	-	NOV	16919
JUN	-	DEC	22452
NOV	-	MAY	-
DEC	-15268	JUN	-
JAN	-1304	JUL	-
FEB	-	AUG	-
MAR	-	SEP	-2400

1.40 CV PFD

TICKER SYMBOL CCN PB — THOUS SH OUTSTANDING 849

	VOL	HIGH	LOW	CLOSE
	12	35-4	35-1	35-1
	14	36-4	35-2	36-1
	16	37	35-3	37
	42		3.80	
	7	37-1	36-2	36-2
	9	¤37-4	36-3	37-4
		HOLIDAY		
	5	37-4	36	36
	15	36-4	¤35-4	35-4
	36		3.79	
	9	36-3	¤35-6	36-3
	9	36-5	36-3	36-3
		HOLIDAY		
	45	¤38	36-6	37-1
	13	37-6	36-6	37-4
	76		3.87	
	40	38-3	37-6	38-3
	30	¤38-4	37-4	38-2
		HOLIDAY		
	13	38-1	¤37-2	37-2
	16	37-6	37-2	37-3
	99		3.89	
	11	¤38-2	37-6	37-6
	12	37-6	37-2	37-2
		HOLIDAY		
	16	37	35-2	35-2
	13	35-2	¤35	35
	52		3.70	
	7	35	¤34-1	34-4
		HOLIDAY		
	4	36	35-2	36
	15	¤37-4	36	37-4
	6	37-4	36-6	37
	32		3.94	
		HOLIDAY		
	30	38-4	¤37-4	38-4
	11	¤39-3	38	38
	4	38-2	37-7	37-7
	8	37-7	37-4	37-4
	53		3.93	
	8	37-7	¤37	37
	10	37-4	37	37
		HOLIDAY		
	13	¤38	37-3	37-3
	8	37-3	37-2	37-3
	39		3.87	
	10	37-1	36-6	36-6
	8	37-2	¤36	37-2
	15	36-4	37-4	38-2
		HOLIDAY		
	26	¤40	38-7	40
	59		4.10	
	20	¤40-4	39-4	40-4
	29	39-7	¤38-4	39-7
		HOLIDAY		
	29	40	38-6	38-6
	13	39-4	38-6	38-7
	91		3.96	
	17	¤40-2	38-6	39-1
	9	40	40	40
		HOLIDAY		
X	38	40-1	39-4	39-6
	12	40-2	¤38-4	38-4
	76		4.07	
	12	¤40-4	39-1	40
	11	39	¤37	37
		HOLIDAY		
	7	37-6	37-3	37-3
	7	38	37-2	38
	37		3.83	
	22	36-6	¤36	36
	4	38-2	37-1	38-2
		HOLIDAY		
	7	38-2	37-3	38-2
	24	¤38-5	37-6	38
	57		4.01	
	19	39-6	37-6	37-7
	84	39	37-7	39

1.875FOR X-RIGHTS

JAN	-	JUL	-
FEB	-	AUG	-
MAR	-	SEP	-
APR	-	OCT	-
MAY	-	NOV	-
JUN	-	DEC	-
NOV	-	MAY	-
DEC	-	JUN	16566
JAN	-	JUL	-
FEB	-	AUG	-
MAR	-	SEP	-

TICKER SYMBOL PPA — THOUS SH OUTSTANDING 1619

	VOL	HIGH	LOW	CLOSE
	13	52-7	51-6	52-6
		HOLIDAY		
	20	55-2	53-2	55-2
	11	55-4	54-6	55
	44		5.82	58-6
	15	¤55-6	55	55-4
	5	55-1	54-4	54-4
		HOLIDAY		
	9	54-7	¤54-2	54-7
	107	55-3	55	55-2
	136		5.78	59
			55	55-1
	9	55-2	55-2	55-2
		HOLIDAY		
	55	55-4	¤54-3	55-3
	42	¤55-7	55-2	55-7
	106		5.77	59-1
	2	¤55-3	55-2	55-2
	10	55	54-2	54-6
		HOLIDAY		
	8	54-4	53-5	53-5
	6	53-7	¤53-3	53-7
	24		5.61	59-3
	21	¤54	53-1	53-1
	4	53-4	53-2	53-3
		HOLIDAY		
	16	53	52-6	52-6
	5	52-5	¤52	52
	46		5.54	59-2
	50	52	¤52	52
		HOLIDAY		
	14	¤52-4	52	52-3
	5	52-4	52-2	52-4
	11	52-4	52-2	52-2
	89		5.52	59-1
		HOLIDAY		
	12	53-3	¤52-4	52-5
	20	¤54-4	54-2	54-2
	1	54	54	54
	9	53-4	52-6	52-7
	42		5.66	59
	5	52-6	52-1	52-3
	25	¤53-5	¤51-3	53-3
		HOLIDAY		
	10	53-2	52-4	53-2
	11	52-7	52-4	52-4
	51		5.52	58-6
X	19	52-7	¤52-1	52-1
	9	¤53-3	52-4	53-3
	6	53	52-6	53
		HOLIDAY		
	5	53-3	53	53
	39		5.43	58-3
	9	53-3	52-4	53-3
	7	53	52-4	53
		HOLIDAY		
	24	53	52-1	52-6
	51	¤53-6	¤52	53-5
	91		5.40	58-1
	16	55	¤53-6	55
	110	¤55-5	54-6	54-6
		HOLIDAY		
	10	55-4	55	55-2
	10	55	54-5	54-5
	146		5.65	57-7
	2	54-3	54-1	54-1
	4	¤54-5	54-2	54-2
		HOLIDAY		
	3	54	¤53-6	53-6
	12	54-4	53-6	53-6
	21		5.51	57-4
	9	¤53-4	52-2	52-2
	7	51-7	¤51-2	51-7
		HOLIDAY		
	5	52-5	52	52-5
	3	53	53	53
	24		5.51	57-1
	97	53-5	52-3	53-4
	3	53-4	53-2	53-2

.350 $ 2.36

EARN

DIV

JAN	-	JUL	-
FEB	-	AUG	-
MAR	-	SEP	-
APR	-	OCT	-
MAY	-	NOV	-
JUN	-	DEC	-
NOV	-	MAY	-745
DEC	-1620	JUN	-1353
JAN	-	JUL	-1000
FEB	-	AUG	-
MAR	-	SEP	-

1969

BANGOR PUNTA CORP

TICKER SYMBOL — THOUS SH OUTSTANDING
BNP — 2157

	NOV	HIGH	LOW	CLOSE
		HOLIDAY		
	81	46-6	45	46-4
	169	47-4	46	47
	240	4.88		47-6
	212	<47-2	45-6	46-6
	101	46-1	45-1	45-1
	180	46	<44-1	45-6
	23	46-3	45-5	46-1
	56	46-5	46	46
	970	5.09		43-5
	34	46-1	<45-7	46-1
	44	46-1	45-6	46-1
	116	47	46-5	46-6
	103	47-1	46-7	47
	106	<47-6	46-7	47-4
	407	5.01		43-5
	146	48	<47-2	47-5
	70	48-5	47-6	48-1
	93	49-1	48-5	49-2
	75	49-1	48-6	49-1
	145	<50-1	49-1	50-1
	529	5.25		43-7
	73	<50-2	<48-1	48-2
	29	49	48-1	48-6
	59	49-6	48-6	49-1
	66	49-6	48-6	48-6
	87	49	48-2	48-5
	312	5.15		44
	145	48-7	48-2	48-6
	106	48-6	<48-1	48-1
	36	49	48-2	48-6
	73	<49-6	48-7	49
	38	49	48-6	48-6
	998	9.18		44-2
		HOLIDAY		
	59	<49	48-5	48-7
	143	49	48-2	48-2
	73	48-6	47-6	47-6
	42	47-7	<45-6	46
	317	4.99		44-6
	87	<47	42-6	42-5
	42	44-6	43	43-6
	38	44	43	43-7
	91	43-6	<41-7	42-2
		HOLIDAY		
	290	4.57		44-6
X	39	<41-6	40-3	40-5
	59	40-5	39-1	39-1
	56	40-2	39-1	39-5
	79	39-7	38-6	38-6
	92	38-7	<38-2	38-6
	329	4.29		44-5
	68	39	<38-3	38-3
	90	39-5	38-3	39-6
	89	39-6	39-2	39-6
	130	<40-2	39-1	39-1
	15	39	38-5	39
	392	4.28		44-5
	9	39	38-4	38-5
	52	<39-6	38-5	39-5
	85	39-6	39-4	39-4
	84	39-2	38-2	38-2
	29	38-6	<38	38-2
	329	4.22		44-5
	10	38-4	38-2	38-4
	7	38-7	38-5	38-5
	39	<39	38	38
	25	38-2	38	38-2
	32	38	<37	37-1
	113	4.16		44-4
	49	36-2	35-4	36-2
	38	36	35-4	35-4
	76	35-4	<32-7	33-7
	113	34-5	34	34-2
	57	<34-4	34-1	34-3
	333	3.68		44-3
		HOLIDAY		

1/1 1/1
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1969

CHRIS-CRAFT INDUSTRIES

TICKER SYMBOL — THOUS SH OUTSTANDING
CCN — 1395

	NOV	HIGH	LOW	CLOSE
		HOLIDAY		
	57	40-6	39-1	40-4
	79	41-4	40-2	41-6
	132	4.27		37-7
	57	<41-6	39-5	40-5
	94	41	39-5	40-1
	57	40-1	39-1	39-3
	42	40-3	39-2	39-2
	116	40-3	<38-6	40
	364	4.23		37-7
	97	40-3	<39-7	40
	85	41-4	39-7	41-4
	386	44-4	42-1	43-7
	341	45-1	44	44-7
	83	<45-2	44-5	44-5
	992	4.78		38-1
	244	48-4	<44-2	48-4
	781	50-5	47	49-7
	120	49-3	47-4	48-3
	615	<54	50-6	51-4
	408	52	50	51-5
	2168	5.48		38-4
	141	52	51-3	51-6
	283	<52-4	51-2	52-4
	197	52-4	51-5	51-7
	188	51-3	49-6	50
	100	49-2	<48-5	48-5
	889	5.31		38-7
	52	48-7	<47-3	47-7
	103	51-2	48	51
	106	52-6	51-6	52-3
	203	53-7	52-5	53-7
	354	<55-7	54-1	55-4
	816	9.69		39-1
		HOLIDAY		
	373	5.26		39-7
X	50	48-7	<46-6	47-1
	190	50	47-7	48-2
	79	<50-6	48-3	50-2
	45	50-6	49-3	50
	117	49-6	48-6	49-1
	481	5.54		40-3
	70	<49	47-4	47-5
	52	47-1	<45-6	45-7
	315	47-6	46-1	47-5
	39	47-4	46-2	46-3
	26	46-1	46	46-1
	502	5.08		40-6
	9	46-7	46-1	46-7
	19	<47-6	46-5	47-5
	55	47-4	45-1	46-1
	30	46-5	45-6	45-6
	64	46-1	<44-6	45-2
	177	5.09		41-1
	49	45	<46-6	45
	54	46-3	45-2	45-7
	188	48-4	45-3	48-4
	45	<48-5	47-3	47-4
	43	48-3	47-6	48-3
	379	5.18		41-5
	41	<48-7	48-2	48-7
	38	48-6	47-4	47-5
	35	47-2	46	46-3
	13	46-4	46	46
	28	46-5	<45-6	46
	155	4.94		42
		HOLIDAY		

CHRIS-CRAFT INDUSTRIES
1.40 CV PFD

TICKER SYMBOL — THOUS SH OUTSTANDING
CCN PB — 820

	NOV	HIGH	LOW	CLOSE
		HOLIDAY		
	25	40-6	39	39-5
	6	40-2	39	40
	31	4.18		
	24	<40-4	38-4	39
	15	40	38-3	38-6
	8	39-4	<38-1	38-1
	10	39	38-4	38-4
	3	39	38-6	38-6
	60	4.15		37
	10	39	<38-6	39
	2	40	40	40
	24	44-4	41	42-5
	47	<44-6	44	44-4
	25	44-4	44-2	44-2
	108	4.74		37-1
	53	47-3	<43-6	47
	44	49-7	46-2	48-6
	33	48-6	47-1	47-6
	62	<53-4	50-2	50-4
	64	52	50-2	50-6
	256	5.37		37-4
	48	51-2	50-4	50-7
	63	<52	50-2	52
	21	52	50-6	50-7
	51	50-5	48-4	48-4
	25	47-7	<47-4	47-6
	208	5.15		37-7
	10	48-4	<47-1	47-1
	10	50-4	50	50-2
	42	52-4	50-6	52
	29	53-6	52-1	52-6
	15	<55	53-5	54-4
	106	9.57		38-2
		HOLIDAY		
	16	<58	55-1	55-3
	2	54-6	53-6	53-6
	12	53-6	<53-4	53-4
	4	53-6	53-4	53-4
	34	5.62		38-6
	9	<53-4	53-2	53-2
	14	52-7	52-4	52-4
	32	50	<48	48
	3	48-5	48-1	48-5
		HOLIDAY		
	50	5.26		39-1
X	4	48-2	48	48-2
	12	49	<47-2	47-2
	2	47-5	47-5	47-5
	8	<49-7	49-3	49-3
	6	49-6	48	48-2
	32	5.47		39-5
	2	<46-7	46-6	46-6
	11	46-2	45-4	46-2
	4	46-7	46-4	46-4
	5	46-4	45-3	45-3
	4	45-2	<45-2	45-2
	26	4.97		40
			45-6	46
	10	<46-6	46	46-4
	2	46-4	45-1	45-1
	7	46-2	45-1	46-2
	21	45-1	<45	45-1
	40	5.10		40-3
	11	44-4	<44-3	44-4
	1	45-6	45-6	45-6
	19	46-3	44-4	46-3
	2	<48-4	48-4	48-4
	5	47-2	46-6	47-2
	38	5.27		40-7
	2	<48-7	47-6	47-6
	3	47-6	46-6	46-6
			45-3	46-4
	4	45-6	45-2	45-3
	4	45-4	<45	45
	13	4.87		41-3
		HOLIDAY		

1969

PIPER AIRCRAFT CORP

TICKER SYMBOL — THOUS SH OUTSTANDING
PPA — 1432

	NOV	HIGH	LOW	CLOSE
		HOLIDAY		
1/1	11	53-5	53-1	53-1
2	363	54	53-1	53-7
3	374	5.61		56-6
6	221	54-2	54	54-2
7	25	53-6	53	53-2
8	325	53-4	<52-6	52-6
9	12	<54-7	52-5	54-5
10	3	54-1	54-2	54-2
	586	5.89		56
13	22	<54-2	52-6	52-6
14	55	53	52-2	52-6
15	12	53	52-6	52-6
16	28	52	51-6	51-6
17	7	51-5	<51-2	51-3
	124	5.51		55-3
20	20	51-6	<50-7	50-7
21	39	51-7	51-2	51-7
22	21	52-7	52-2	52-6
23	139	60-4	59	60-4
24	368	<62-7	61-4	62-6
	587	6.43		55-2
27	252	63-6	62-5	63
28	49	<64-2	63-6	64-2
29	59	64-2	60-6	61-5
30	120	60-6	<58-4	59
31	71	60-6	59-4	60-1
	551	6.26		55-1
2/3	56	59-6	<58-7	59-5
4	18	62	60-2	62
5	57	64-7	62-4	64-7
6	92	67-4	65	66
7	69	<68	67-6	68
	292	6.97		55-1
		HOLIDAY		
10	74	<70	69-3	69-5
11	58	69-6	68	68
12	72	69-6	<67-6	69-6
13	62	69-6	68-6	69-6
14	266	7.30		55-3
17	168	69	67-5	67-7
18	139	70	<67-4	70
19	132	<72	70-3	71-6
20	149	72	70-6	71-1
21		HOLIDAY		
	588	7.69		55-7
24	56	<70	69	69
25	84	69-1	67-4	67-6
26	73	68-3	<67-3	68-1
27	29	68-1	67-5	68-1
28	57	69	68	69
	299	7.54		56-3
3/3	25	69	<67-2	68-2
4	21	68-5	68-4	68-6
5	38	69-2	68-2	69
6	48	69-4	69-2	69-4
7	61	<70	68-7	70
	193	7.61		57
10	24	71-2	<70	71-2
11	41	73-6	72	72-5
12	32	73-6	73-4	73-4
13	30	<73-6	73-4	73-6
14	65	73-1	72-4	72-4
	180	8.13		57-5
17	90	71-6	69-5	70-6
18	80	72-2	72	72
19	81	<73-3	73	73-3
20	35	73-3	71-2	71-2
21	33	70-4	<68-7	69-6
	201	7.74		58-2
24	35	69	<68-1	68-4
25	14	69-2	68-4	69-2
26	48	69-4	69-2	69-2
27	14	69-4	69-4	69-4
28	25	<70	69-2	69-2
	136	7.47		58-6
31		HOLIDAY		

JAN — $ 2.55
.850
INV

APR	26837	OCT	-
MAY	21313	NOV	-
JUN	18878	DEC	-
JUL	6729	JAN	-
AUG	-	FEB	-
SEP	-	MAR	-
FEB	-	AUG	-2[illegible]
MAR	-	SEP	-
APR	-	OCT	28000
MAY	-	NOV	-
JUN	-	DEC	49944
JUL	-	JAN	200

JAN — $ 2.11
.250
INV

APR	-	OCT	19690
MAY	-	NOV	16919
JUN	-	DEC	22452
JUL	13516	JAN	12817
AUG	25841	FEB	37731
SEP	45232	MAR	37722
FEB	-	AUG	-
MAR	-	SEP	-2400
APR	-	OCT	-
MAY	-	NOV	-
JUN	-	DEC	-
JUL	-	JAN	3294

.700

APR	-	OCT	-
MAY	-	NOV	-
JUN	-	DEC	-
JUL	-	JAN	-
AUG	-	FEB	-
SEP	-	MAR	-
FEB	-	AUG	-
MAR	-	SEP	-
APR	-	OCT	-
MAY	-	NOV	-

JAN — $ 2.14
.850
INV

APR	-	OCT	-
MAY	-	NOV	-
JUN	-	DEC	-
JUL	-	JAN	-
AUG	-	FEB	2467
SEP	-	MAR	13402
FEB	-	AUG	-
MAR	-	SEP	-
APR	-500	OCT	-
MAY	-749	NOV	-
JUN	-1330	DEC	-
JUL	-1000	JAN	-

1969

BANGOR PUNTA CORP

Trade Stock — Shares Sd Outstanding
BAN — 3017

	VOL	HIGH	LOW	CLOSE	
	39	37-3	36	36-7	4/1
	103	36-5	35-6	36-1	2
	96	36-5	36-1	36-4	3
		HOLIDAY			4
	238	3.96		44-1	
	99	<36-4	35-4	35-5	7
	314	35-4	34-7	34-7	8
	56	34-6	34	34-6	9
	41	34-7	<33-3	33-4	10
	148	34-4	33-5	34-2	11
	499	3.59		43-7	
	28	<34-3	34	34-1	14
	34	34-1	33-4	33-4	15
	43	33-6	33-3	33-3	16
	23	33-6	32-7	33-2	17
	27	33-4	<32-5	33-2	18
	155	3.60		43-4	
	30	33-3	32-2	32-2	21
	79	33	<32-1	32-6	22
	61	<34-2	33-1	33-7	23
	94	33-7	33-2	33-2	24
	57	33-3	32-7	33	25
	277	3.61		45-1	
	250	33-2	32-4	32-6	28
	31	34	<32-2	33-5	29
	84	33-6	34-3	33-3	30
	90	<33-7	34-7	34-7	5/1
	42	35	34-1	34-6	2
	457	3.67		42-7	
	36	35-1	34-4	34-7	5
	109	<35-2	34-3	34-5	6
	402	34-5	<32-6	32-6	7
	73	34-1	32-7	34-1	8
	107	34-5	33-7	34-3	9
	229	3.64		42-5	
	36	<34-3	33-6	33-7	12
	47	33-5	<32-6	33-6	13
	42	33-6	33	33-1	14
	93	33-5	33-1	33-6	15
	30	33-6	33-1	33-1	16
	216	3.67		42-1	
	56	33-3	<32-3	33-1	19
	32	32-7	32-6	32-6	20
	62	33-2	32-6	33-2	21
	58	<33-6	32-6	32-6	22
E	22	33-2	32-5	33-2	23
	230	3.65		41-5	
	21	<33-3	33	33	26
	90	32-7	32-1	32-1	27
	35	32	<31-5	31-5	28
	10	32-1	31-6	31-7	29
		HOLIDAY			30
	136	3.40		41-2	
	48	31-3	30-2	30-6	6/2
	93	30-5	<29-5	30-5	3
	66	30-7	30	30-7	4
	185	32-3	30-6	32	5
	20	<32-4	31-7	31-1	6
	380	3.99		40-7	
	31	<31-6	31-5	31-5	9
	23	31-6	31-3	31-3	10
	142	31-2	30-5	30-5	11
	47	30-4	29-7	29-7	12
	106	30-4	<29-5	30-2	13
	349	3.35		40-3	
	24	<30-6	30-2	30-3	16
	288	30-4	29-7	29-7	17
	36	30-3	29-3	29-5	18
	30	29-6	28-1	28-1	19
	22	28-1	<27-2	27-2	20
	400	3.19		39-6	
	77	<27-2	<24-7	26	23
	33	26-6	26-1	26-1	24
	24	26-6	26-1	26-3	25
	33	26-3	25-4	25-6	26
	15	25-6	25-5	25-6	27
	182	2.98		33-1	
	62	29-7	29-2	29-7	30

.150 — $ 2.62 — EARN — DIV

JUL	6729	JAN	-		S
AUG	-	FEB	-		H
SEP	-	MAR	-		O
OCT	-	APR	-		R
NOV	-	MAY	-		T
DEC	-	JUN	-		
MAY	-	NOV	-		L
JUN	-	DEC	49941		N
JUL	-	JAN	350		S
AUG	-200	FEB	-		I
SEP	-	MAR	-		N
OCT	28000	APR	-		E

1969

CHRIS-CRAFT INDUSTRIES

Trade Stock — Shares Sd Outstanding
CCN — 1395

	VOL	HIGH	LOW	CLOSE	
	18	46	46	46	4/1
	29	46	45	45-5	2
	59	45-2	44-5	45	3
		HOLIDAY			4
	106	4.85		42-3	
	44	44-5	43-6	43-6	7
	106	45-2	<43-5	45-2	8
	161	<45-7	45	45-7	9
	34	45-7	45-3	45-7	10
	9	45-7	45-2	45-2	11
	354	4.92		42-6	
	58	45	44-2	44-5	14
	61	45-2	44-4	44-6	15
	36	44-6	<44-1	44-6	16
	40	<45-5	44-6	45-5	17
	43	45-5	44-6	45-2	18
	230	4.94		43	
	31	<45	44-5	44-7	21
	102	44-6	43-5	43-5	22
	218	44-2	41	41-3	23
	88	41-6	41	41	24
	109	41	<40-6	40-7	25
	548	4.45		43-1	
	139	43-1	<41-3	42-5	28
	181	43-2	42	42-7	29
	249	45	43-5	44-3	30
	119	<45-2	44-4	44-4	5/1
	56	44-5	44-2	44-4	2
	338	4.71		43-6	
	46	45-3	44-5	45	5
	193	45-2	44-6	45-2	6
	235	46-6	45-1	46-6	7
	224	<48-2	44-4	44-4	9
	226	43-6	<42-4	43-4	9
	926	4.62		43-6	
	71	43-7	43-1	43-5	12
	120	<44	43-2	43-3	13
	112	43-6	43-2	43-5	14
	386	43-7	<42-4	42-6	15
	47	43-7	43-2	43-7	16
	736	4.43		43-7	
	58	<43-7	43-2	43-2	19
•	87	21-6	21-1	21-2	20
	146	21-6	21-1	21-6	21
	115	21-5	<20-5	20-5	22
	85	20-7	20-6	20-7	23
	461	2.17		22	
	426	<21	<20-6	20-7	26
	46	20-6	20-6	20-6	27
	32	20-6	20-6	20-6	28
	50	20-6	20-6	20-6	29
		HOLIDAY			30
	794	2.21		22-1	
	28	20-6	20-6	20-6	6/2
	126	<20-6	18-6	19	3
	294	19-5	19	19-2	4
	197	19-4	19-1	19-4	5
	216	19-4	<18-2	18-7	6
	821	2.10		22-1	
	148	<19	18	18-6	9
	112	18-6	18	18	10
	73	18-3	17-6	17-6	11
	110	17-7	<16-6	16-7	12
	85	17-2	16-7	17-1	13
	528	1.89		22	
	57	17	16-6	17	16
	210	<17-1	<15	16-6	17
	87	16-7	15-7	16	18
	119	16-5	15-6	15-6	19
	74	16-1	15-6	16	20
	947	3.77		21-7	
	34	16	<15-6	16	23
	78	16-6	16	16-6	24
	76	<16-6	16-1	16-6	25
	26	16-5	16-2	16-5	26
	68	16-5	16-1	16-5	27
	274	1.91		22-6	
	103	16-5	16-5	16-5	30

$ 1.02 — EARN — DIV

*2/1 STOCK SPLIT

JUL	13516	JAN	12417		
AUG	25941	FEB	17751		
SEP	45732	MAR	17722		
OCT	29690	APR	29591		
NOV	16919	MAY	14730		
DEC	22452	JUN	20769		
MAY	-	NOV	-		
JUN	-	DEC	-		
JUL	-	JAN	3890		
AUG	-	FEB	-		
SEP	-2490	MAR	-		
OCT	-	APR	-		

1.40 CV PFD

Trade Stock — Shares Sd Outstanding
CCN PR — 423

	VOL	HIGH	LOW	CLOSE	
	10	45	45	45	
	1	44-4	44-4	44-4	
	12	44	44	44	
		HOLIDAY			
	23	4.75		41-4	
	1	<45	<43-2	44	
			44-2	45	
	38	45	45	45	
	2	44-5	44-5	44-5	
	2	45	45	45	
	41	4.73		42	
	1	43-5	<43-6	43-6	
	2	44	44	44	
	2	44	44	44	
	3	44-5	44	44-5	
	14	<45	45	45	
	22	4.83		42-3	
	1	<44-4	44-4	44-4	
	2	44-1	44	44	
	22	43-2	40-2	40-2	
	3	40-4	<40	40	
			40	41	
	28	4.34		42-4	
	16	43	<40-3	42-4	
	1	41-5	41-6	41-6	
	4	44	43-2	43-2	
	10	44	44	44	
	5	<44-3	44	44-3	
	40	4.64		42-6	
	2	44-1	44-1	44-1	
			45	45-4	
	1	45-1	45-1	45-1	
	7	<47-7	44-2	44-2	
	2	41-4	<41-4	41-4	
	12	4.59		43	
	5	<44	43-5	43-5	
	3	44	44	44	
	4	42-5	42-4	42-4	
	7	42-5	<41-6	41-6	
			42-6	43-2	
	17	4.33		43-1	
	1	<43-2	43-2	43-2	
	2	42-6	42	42-6	
	1	42	42	42	
	1	41-7	<41-7	41-7	
			40-6	41-4	
	5	4.41		43-2	
	5	<41-4	41-4	41-4	
	5	40-6	<40-4	40-4	
	6	41-2	40-4	41-2	
	1	40-4	40-4	40-4	
		HOLIDAY			
	17	4.32		43-4	
	13	<40-2	39-6	39-6	
	7	39-4	37-4	37-4	
	26	38-6	37	38-6	
			38	38-6	
	1	36-4	<36-4	36-4	
	47	4.16		43-4	
	2	<37	37	37	
	6	37	37	37	
	11	37	34-5	34-6	
	6	33-6	<33	33	
			32-6	33-2	
	25	3.70		43-3	
			32-4	34	
	17	<32-4	31-6	31-6	
	1	32	32	32	
	6	31-4	<30-2	31	
	2	32	32	32	
	26	3.51		43-1	
	2	30-4	<30-4	30-4	
	3	<32-4	32	32-4	
	3	31-6	31-2	31-2	
			31-6	32-7	
			31-4	32-7	
	8	3.78		42-7	
			31-3	33-2	

EARN — DIV

JUL	-	JAN	-		
AUG	-	FEB	-		
SEP	-	MAR	-		
OCT	-	APR	-		
NOV	-	MAY	-		
DEC	-	JUN	-		
MAY	-	NOV	-		
JUN	16544	DEC	-		
JUL	-	JAN	-		
AUG	-	FEB	-		
SEP	-	MAR	-		

1969

PIPER AIRCRAFT CORP

Trade Stock — Shares Sd Outstanding
PPA

	VOL	HIGH	LOW	CLOSE	
	18	69-4	68-4	69-	
	26	67-6	67-4	67	
	19	67-4	67-2	67-	
		HOLIDAY			
	65	7.26		69-	
•					
•	71	<68-4	<65	67-	
	32	67-2	67	67	
	41	67	66-7	66-	
	20	67	67	67	
	14	68-6	66-4	66-	
	179	7.21		62-	
	4	66-2	<65-2	65-	
	31	66-4	66-2	66-	
	18	67-5	66-2	67-	
	32	69	68	69	
	16	<69-6	69	69	
	101	7.27		62-	
	1	69-4	69-4	69-	
	10	69	<69	69	
	63	70	69	70	
	105	71-4	69-6	71-	
	38	<73	72-2	72-	
	217	7.42		61-	
	15	73	72-6	72-	
	16	72-6	72-6	72-	
	55	73	72-6	72-	
	16	73	<72-2	72-	
	67	<77-2	75-2	76	
	162	7.49		61-	
	150	<79	76-6	77-	
	59	78	76	76	
	19	77-3	77	77	
	23	77-3	76	76-	
	92	76	<75-6	75-	
	299	8.03		62-	
E	34	<75-6	75	75-	
	26	75	75	75	
	30	75	75	75	
	48	75	<74-6	75	
		HOLIDAY			
	130	8.00		63-	
	22	<74-4	74-2	74-	
	65	74	71	71	
	118	70	<69	70	
	23	70	69-4	69-	
	33	70	69-4	70	
	201	7.97		63-	
	15	<69	69	69	
	14	68-6	68	68-	
	6	67-7	67-4	67-	
	16	67-4	66-6	66-	
	25	66	<66	66	
	74	7.48		64-	
	16	<66-4	65	65	
	23	65	64-6	64-	
	4	66-4	<66-4	66-	
	12	65-6	64-4	65-	
	3	65	65	65	
	58	7.49		64-	
	10	<66-4	63-6	63-	
	4	63-2	63-2	63-	
	10	63-1	63	63-	
	2	63	63	63	
	9	62-6	<62-2	62-	
	33	7.24		63	
	4	62-2	62-2	62-	

$ 2.1

*SUSPENDED
*RESTATED
.950

JUL	-	JAN	-		
AUG	-	FEB	2467		
SEP	-	MAR	13402		
OCT	-	APR	-		
NOV	-	MAY	-		
DEC	-	JUN	-		
MAY	-769	NOV	-		
JUN	-1335	DEC	-		
JUL	-1005	JAN	-		
AUG	-	FEB	-		
SEP	-	MAR	-		
OCT	-	APR	-		

1969

BANDOR PUNTA CORP

TICKER SYMBOL BNK — THOUS SH OUTSTANDING 3149

	NOT	HIGH	LOW	CLOSE
7/1	48	25-7	25-2	25-6
2	127	>26	25-2	25-2
3	65	25-5	>25	25-3
4		HOLIDAY		
		2.86		38-2
7	32	25-5	25-1	25-3
8	72	25	>23-5	24-4
9	37	25-3	24-4	25
10	46	25-5	25	25-1
11	20	>25-6	24-7	25-3
	216	2.96		37-6
14	29	>25-5	24-4	24-4
15	39	24-7	24	24-2
16	23	24-3	24	24-1
17	88	24-5	23-5	24-4
18	61	24-1	>23	23-4
	248	2.87		36-6
21		HOLIDAY		
22	37	>23-3	23	23
23	47	23-3	22	22
24	34	22-4	22-1	22-1
25	61	22-3	>20-7	20-7
	179	2.68		36
28	13	21-2	21	21-1
29	67	21-2	21	21-2
30	28	21-1	>20-6	21-1
31	72	22-2	21-4	21-4
8/1	45	>22-7	21-6	22-5
	215	2.64		35-1
4	45	24	22-6	23-3
5	18	24	23-3	24
6	47	>24-6	23-6	23-6
7	87	23-4	>21-6	22-7
8	10	22-5	22-1	22-5
	214	2.77		34-3
11	29	>23-3	22-1	22-6
12	39	23-2	22-2	23-2
13	59	22-7	22-1	22-1
14	31	22-4	>22-1	22-2
15	15	22-5	22-3	22-3
	173	2.74		33-4
18	65	24-6	>22-4	24-6
19	125	26	24-3	26
20	50	26	24-6	26
21	21	26-2	25-6	26-1
22	22	>26-4	26	26-4
	283	3.13		32-6
25 X	34	>26-3	25-2	25-2
26	25	25-6	24-5	25-5
27	15	26	25-5	25-7
28	67	25	24-2	24-4
29	59	24-7	>23-6	24
	200	2.98		32
9/1		HOLIDAY		
2	37	>24-6	23-6	24
3	37	24	22-7	23
4	25	22-7	22-2	22-2
5	39	22-2	>21-2	21-6
	138	2.78		31-1
8	112	21	20-1	20-3
9	145	20-6	>20	20-5
10	69	21-6	21	21-6
11	88	22-2	21-2	21-5
12	85	>22-1	22	22-2
	499	2.92		30-2
15	49	>22-1	21-4	21-6
16	37	22	21-6	21-6
17	21	21-7	21-3	21-3
18	25	21-7	21-1	21-1
19	45	21-4	>21	21-1
	177	2.54		29-6
22	32	21-4	21-1	21-1
23	168	21-7	>21	21-7
24	87	>23-1	22	22-3
25	27	22-4	21-6	21-6
26	39	21-4	21-2	21-4
	328	2.62		26
29	39	22	21-4	22
30	24	22	21-2	22

1969

CHRIS-CRAFT INDUSTRIES

TICKER SYMBOL CCN — THOUS SH OUTSTANDING 3281

	NOT	HIGH	LOW	CLOSE
	124	17-1	>16-1	16-5
	55	16-7	16-2	16-7
	45	>17-2	16-4	16-6
		HOLIDAY		
		1.89		21-5
	284	17-4	16-6	17-1
	48	>17-4	17-1	17-6
	140	17-5	17-4	17-4
	48	17-4	16-2	16-2
	287	16-3	>15-4	15-4
	767	1.92		21-4
	34	16	15-2	15-4
	36	15-6	15-3	15-5
	98	15-7	15-5	15-6
	55	>16-1	15-5	15-5
	64	16	>15-2	16
	267	1.83		21-3
		HOLIDAY		
	19	>16	15-2	15-4
	282	15	>13	13-7
	52	13-7	13-7	13-7
	31	13-7	13-7	13-7
	384	1.68		21-1
	129	>13-7	12-2	12-4
	100	12-4	12	12
	300	12-3	12	12-3
	102	12-4	12	12
	315	12-2	>12	12-2
	1036	1.47		20-7
	164	12-2	12-1	12-1
	150	12-1	12-1	12-1
	440	>13-2	>12-1	13-1
	257	13-1	12-7	13
	97	13	12-7	13
	1158	1.87		28-6
	96	>13	12-4	12-5
	171	12-5	12-1	12-1
	186	12-5	>11-6	12-4
	176	12-4	12-2	12-3
	199	12-5	12-1	12-3
	828	1.51		28-3
	376	12-5	12-3	12-5
	728	>13-6	>12-3	12-4
	269	12-7	12-4	12-7
	118	13-2	13	13-2
	233	13-2	13	13-2
	1696	1.59		19-7
	126	13-1	12-7	13-1
X	56	12-7	>12-4	12-6
	259	13	12-5	12-6
	115	12-7	12-6	12-6
	61	>13-2	12-6	13-2
	615	1.36		19-6
		HOLIDAY		
	62	>13-1	12-5	12-6
	38	13-1	12-6	12-7
	68	12-5	12-1	12-2
	166	12-4	>12	12
	328	1.48		19
	50	12-1	11-6	11-6
	114	12-3	>11-5	12
	144	12-2	11-7	12
	65	12-3	11-7	12-1
	71	>12-7	12-2	12-2
	444	1.47		18-4
	47	12-6	12-2	12-4
	82	12-7	>12-2	12-5
	65	13	12-6	13
	230	13-7	13	13-7
	86	>14-2	13-7	14
	510	1.47		18-1
	99	>14-4	14	14-3
	87	14-3	14-2	14-2
	86	14-2	13-5	13-5
	37	13-6	>13-2	13-2
	78	13-6	13-4	13-5
	382	1.68		17-6
	61	13-5	12-6	13-1
	84	13-2	12-5	13-2

TICKER SYMBOL CCN — THOUS SH OUTSTANDING 641

	NOT	HIGH	LOW	CLOSE
	2	>33	32-4	32-4
	2	32-4	32-4	32-4
	1	32-4	>32-4	32-4
		HOLIDAY		
		3.67		42-5
			33-4	35-2
			34	35-4
			33-2	35
	6	>34-4	>33-4	34-4
			30	31-4
	6	4.07		42-4
			30	31-4
	1	>30	>30	30
			32-4	31
			30-4	31-4
			30	31-4
	1	3.49		42-2
		HOLIDAY		
			30	31-5
	3	>30-4	>30-4	30-4
			29-4	30-3
			28-4	28
	3	3.68		42
	5	>26	24-6	26
	1	25-3	25-3	25-3
	3	25-4	25-4	25-4
			22-5	24-4
	1	24-6	>24-6	24-6
	10	3.00		41-4
			24	26
			24	26
			24-4	26
			24-4	26
	2	>26-6	>26-4	26-6
	2	3.15		41-1
			24	27
	3	24-2	>23-2	24-2
			24-2	28-4
			23-2	25-2
	2	>25	24	25
	5	3.10		40-3
			24	25-6
			25-4	26
			25-4	26-6
			26	26-6
	2	>26	>26	26
	2	3.20		39-5
X			25	26-6
			25	25-4
			25	25-6
			25	25-4
		3.08		38-7
		HOLIDAY		
	3	>26	25-4	26
	2	25	>24-4	24-4
			24	25
			23	25
	5	3.03		38
			22-6	24
	1	>24	24	24
	1	23	>23	23
			23-2	24-4
			24	25-6
	2	2.97		37
			23-4	25
			24-4	26
	1	24	>24	24
	1	>26-6	26-6	26-6
			26-4	28
	2	3.22		38-2
	1	26	26	26
	1	>28	28	28
	1	27.6	27.6	27.6
	1	26	26	26
	8	26	>26	26
	9	3.13		35.4
			24	26
			26	27.4

1969

PIPER AIRCRAFT CORP

TICKER SYMBOL PPA — THOUS SH OUTSTANDING [illegible]

	NOT	HIGH	LOW	CLOSE
	4	62	62	62
	1	62	>62	62
	13	>64-2	62-4	64-
		HOLIDAY		
		7.24		
	8	66	65	66
	6	>66-4	66	66-
	5	65	65-6	66
	10	65-4	63-4	63-
	18	63-4	>63	63-
	47	7.46		64-
	3	63-4	63	63
	14	62-4	>62-4	62-
	22	64	63	64
	31	67	65	67
	85	>72-4	68	72-
	155	7.85		69-
		HOLIDAY		
	69	>73-2	72	73
	65	73	70-4	70-
	31	70-4	70	70
	44	70	>69	69-
	209	8.47		61-
	76	>69-2	66-4	66-
	52	64-4	63	63
	37	65	>62	65
	32	65-6	64-5	65-
	30	65-3	63	64-
	197	8.05		61-
	10	62-7	62-7	62-
	42	65-2	>62-6	65-
	87	>72	64-6	66
	75	65-7	63-4	65-
	63	70	65-4	66-
	277	7.93		62-

HOLIDAY

BARN INV .150 — $ 2.14

OCT	-	APR	-
NOV	-	MAY	-
DEC	-	JUN	-
JAN	-	JUL	-
FEB	-	AUG	-
MAR	-	SEP	-
AUG	-200	FEB	-
SEP	-	MAR	-
OCT	2000E	APR	-
NOV	-	MAY	-
DEC	4994L	JUN	-

BARN INV .300 — $ .98

OCT	19698	APR	29181
NOV	16913	MAY	14738
DEC	22452	JUN	20765
JAN	12817	JUL	12666
FEB	37731	AUG	27192
MAR	37722	SEP	-
AUG	-	FEB	-
SEP	*2400	MAR	-
OCT	-	APR	-
NOV	-	MAY	-
DEC	-	JUN	-

BARN INV .700

OCT	-	APR	-
NOV	-	MAY	-
DEC	-	JUN	-
JAN	-	JUL	-
FEB	-	AUG	-
MAR	-	SEP	-
AUG	-	FEB	-
SEP	-	MAR	-
OCT	-	APR	-
NOV	-	MAY	-
DEC	-	JUN	-

BARN INV — $ 2.

* SUSPENDED

OCT	-	APR	-
NOV	-	MAY	-
DEC	-	JUN	-
JAN	-	JUL	-
FEB	2487	AUG	-
MAR	13482	SEP	-
AUG	-	FEB	-
SEP	-	MAR	-
OCT	-	APR	-
NOV	-	MAY	-
DEC	-	JUN	-

PIPER AIRCRAFT

Philadelphia-Baltimore-Washington Exchange

1969		Volume	Hi	Lo	Close	Change
August	11	4,672	70-1/4	66	69-1/2	+3-3/4
	12	619	69-1/2	68	69-1/2	-
	13	3,279	73-3/4	70-1/4	73	+3-1/2
	14	1,755	77	71	77	+4
	15	4,148	78-1/2	76-1/2	78-1/2	+1-1/2
	18	3,517	80-3/4	78-1/2	80	+1-1/2
	19	1,550	80-1/2	80	80	-
	20	1,174	80-3/8	80	80-3/8	+3/8
	21	1,166	81	80-1/4	80-1/2	+1/8
	22	782				
	25	558	80-3/8	80-3/8	80-3/8	+1/8
	26	772	80-1/2	80	80-1/2	+1/8
	27	143	80	80	80	-1/2
	28	193	77	77	77	-3
	29	200	75	74	74	-3

1969		Volume	Hi	Lo	Close	Change
September	1		- Holiday -			
	2		**			
	3		**			
	4	279	60	60	60	-14
	5	356	62	62	62	+2
	8		**			
	9		**			
	10		**			
	11		**			
	12	346	60	60	60	-2
	15		**			
	16	220	59	57	59	-
	17	246	63	63	63	+4
	18		**			
	19		**			
	22		**			
	23		**			
	24		**			
	25	100	60	60	60	-3
	26		**			
	29	988	57	55	55	-5
	30	200	55	55	55	-

** No Trading

1969

BANCO PUNTA CORP

TICKER SYMBOL: BNK — THOUS SH OUTSTANDING 1151

	VOL	HIGH	LOW	CLOSE
10/1	76	▸21-7	21-2	21-4
2	74	21-4	▸20-7	21-4
3	41	21-5	21	21
	193	.26		20-4
6	17	21-3	21-1	21-3
7	25	▸21-7	21-2	21-7
8	30	21-1	20-4	20-7
9	42	20-5	▸20-1	20-5
10	29	20-7	20-2	20-4
	179	.25		20
13	89	22	▸20-5	22
14	88	23-4	22-4	22-7
15	68	23-2	22-5	22-7
16	67	23-3	22-5	23-1
17	88	▸25	23-2	23-1
	394	.26		23-5
20	64	24-5	24	24-1
21	52	24-7	24-1	24-7
22	78	▸25	24-3	24-6
23	94	24-5	▸23-4	24
24	16	24-2	23-5	23-5
	244	.26		23-3
27	98	▸24	23-4	23-4
28	59	23-6	22-4	22-6
29	27	22-3	22-1	22-2
30	29	22-4	22-1	22-4
31	70	22-4	▸22	22
	218	.26		22
11/3	26	22-5	22-1	22-5
4	59	▸22-7	22	22-3
5	20	22-5	22-2	22-4
6	29	22-4	▸22	22-4
7	72	22-4	22-1	22-2
	212	.26		24-6
10	94	▸22-3	22	22
11	31	22-1	21-5	21-7
12	41	22-1	21-5	22-1
13	20	22	21-4	21-6
14 E	49	21-6	▸21-1	21-2
	247	.26		26-3
17	42	▸21-3	20-7	20-7
18	◂20	21	20-6	21
19	94	21-4	20-1	20-4
20	62	20-4	19-7	20-1
21	85	19-7	▸18-6	18-7
	243	.24		24
24	124	18-7	▸18-2	18-6
25	48	▸19-2	18-5	19
26	81	19-2	18-6	19
27		HOLIDAY		
28	48	19-1	18-6	18-7
	303	.23		25-4
12/1	64	▸19-2	18-5	18-5
2	41	18-7	18-1	18-3
3	84	18-1	17	17-1
4	190	17-4	▸16-2	17-4
5	47	18-1	16-5	16-5
	366	.22		25
8	110	16-5	15-6	16-7
9	77	16-6	15-7	15-1
10	72	16	15-3	15-7
11	77	15-7	▸15-3	15-5
12	99	▸17-2	16	16-7
	434	.26		26-3
15	99	▸17-1	16-1	16-4
16	67	16-6	16	16
17	88	16-1	15-4	15-4
18	108	16	15-3	15-6
19	194	16	▸15-1	15-6
	434	.26		25-7
22	191	15-3	14-7	15-1
23	129	15	▸14-3	14-7
24	98	15-5	14-6	15-7
29		HOLIDAY		
26	99	▸15-7	15-1	15-6
	364	.26		23-2
29	126	15-7	15-1	15-7
30	192	16	14-6	14-6
31	264	15-3	14-7	15
	582			

EARN .100 — $ 1.44

DIV

JAN	-	JUL	-	
FEB	-	AUG	-	
MAR	-	SEP	-	
APR	-	OCT	-	
MAY	-	NOV	-	
JUN	-	DEC	-	
NOV	-	MAY	-	
DEC	69966	JUN	-	
JAN	100	JUL	200	
FEB	-	AUG	-	
MAR	-	SEP	-	

1969

CHRIS-CRAFT INDUSTRIES

TICKER SYMBOL: CCN — THOUS SH OUTSTANDING 3458

	VOL	HIGH	LOW	CLOSE
10/1	63	13-2	12-7	12-7
2	77	13	▸12-6	13
3	74	▸13-5	13	13-3
	214	.16		17-4
6	71	▸13-2	13	13
7	42	13	12-6	12-6
8	97	12-5	12-4	12-5
9	99	12-4	▸12	12-2
10	40	12-3	12-1	12-3
	345	.15		17-1
13	265	12-7	▸12-2	12-6
14	221	▸13-4	13	13-1
15	88	13-2	13	13-2
16	385	13-3	12-6	13
17	173	13	12-4	12-9
	942	.15		16-7
20	74	12-7	12-5	12-6
21	152	13-2	12-6	12-7
22	170	13-1	12-9	12-6
23	103	12-7	▸12-5	12-6
24	683	▸14-6	12-7	14-6
	1182	.15		16-4
27	962	14-7	▸14-1	14-7
28	370	▸16-1	14-6	16-1
29	270	16-1	15-3	15-4
30	161	15-5	14-5	14-7
31	649	15-2	14-3	14-7
	2812	.17		16-3
11/3	124	14-7	14-3	14-3
4	110	14-5	▸13-6	14-1
5	102	14-6	14-1	14-6
6	64	14-7	14-2	14-7
7	360	▸15-6	14-6	15-4
	700	.17		16-2
10	271	▸15-4	14-5	14-6
11	145	14-6	14-1	14-3
12	77	14-3	13-7	14
13	150	14	13-4	13-6
14	77	14	▸13-4	13-4
	720	.16		16-1
17	44	▸13-4	12-7	12-7
18	98	13-3	12-7	13-1
19	67	13-3	12-6	12-7
20	84	12-7	12-4	12-5
21	132	12-5	▸12-2	12-3
	469	.15		15-7
24	129	12-4	▸12	12-1
25	84	12-4	12-1	12-1
26	67	12-4	12-1	12-4
27		HOLIDAY		
28	156	▸13	12-2	13
	436	.16		15-5
12/1	43	▸13	12-4	12-4
2	133	12-1	11-6	11-6
3	176	11-4	10-6	10-6
4	113	12	▸10-4	11-4
5	63	12-1	11	11-1
	526	.14		15-3
8	63	▸11-2	10-7	11-1
9	149	11-1	10-4	10-4
10	91	11	10-4	10-6
11	93	11	10-5	10-6
12	135	11	▸10-4	10-4
	491	.14		15-1
15	117	10-7	10-2	10-3
16	103	10-4	10	10
17	109	10-3	▸9-4	9-7
18	152	10-3	9-6	10-1
19	214	▸11-1	10-2	11
	839	.13		14-6
22	173	▸11-1	10-3	10-6
23	194	10-6	9-7	10-2
24	148	10-3	▸9-6	10-2
29		HOLIDAY		
26	69	10-7	10-2	10-5
	918	.13		14-4
29	159	10-7	9-7	10-7
30	145	10-4	10	10-6
31	247	10-6	10	10-6
	991			

EARN — $ .81

DIV

JAN	12817	JUL	17066	
FEB	37731	AUG	27192	
MAR	37727	SEP	-	
APR	29191	OCT	-	
MAY	14734	NOV	-	
JUN	28769	DEC	-	
NOV	-	MAY	-	
DEC	-	JUN	-	
JAN	9250	JUL	-	
FEB	-	AUG	-	
MAR	-	SEP	-	

1.40 CV PFD

TICKER SYMBOL: CCN PR — THOUS SH OUTSTANDING 578

	VOL	HIGH	LOW	CLOSE
		26	30	10/1
2	▸26	▸26	26	2
		25	26	3
2		.12	34-7	
2	▸25	24-4	24-4	6
		25	28	7
		25	28	8
1	24-4	24-4	24-4	9
4	22-6	▸22-5	22-5	10
7		.19	34-1	
1	23-4	▸23-4	23-4	13
1	▸25-2	25-2	25-2	14
2	24-6	24-6	24-6	15
		25-4	28	16
		25	28	17
4		.33	33-6	
1	26-4	26-4	26-4	2
1	27-4	27-4	2	
6	24-6	▸24-6	2	
1	26	26		
4	▸28	26		
13		.30		
1	28	▸28	2	
3	30	29-2	30	
2	▸32-2	32-2	32-2	4
		28	32	30
2	28-6	28-6	28-6	31
8		.30	33-1	
3	29-6	28	28-6	11/3
1	28	28	28	4
2	29-4	28	29-4	5
3	28	▸28	28	6
1	▸31-4	31-4	31-4	7
10		.33	32-7	
		29	31	10
2	▸30-6	27-6	27-6	11
		28	30	12
3	28	▸27	27	13
		24	27-6	14
9		.32	32-3	
9	25-4	25	25	17
1	25	25	25	18
3	25-4	25-2	25-2	19
1	▸26-4	26-6	26-4	20
1	25	▸25	25	21
15		.32	32	
1	▸25	25	25	24
3	23-2	▸23-2	23-2	25
3	25	25	25	26
	HOLIDAY			27
		23	25	28
7		.31	31-5	
		23-2	25	12/1
1	23-2	23-2	23-2	2
4	23	▸21-4	22	3
6	23-1	22	22-4	4
6	▸23-4	22-6	23-6	9
17		.28	31	
2	▸22-1	22-1	22-1	8
		28	32	9
2	21-4	▸20-4	21-4	10
1	21-2	21-2	21-2	11
7	21-6	21	21	12
12		.27	30-3	
1	▸21-6	21-6	21-6	15
9	20-2	20	20	16
32	20	▸19	20	17
6	20	19-6	19-6	18
2	21-4	20-4	21-6	19
98		.25	29-5	
7	▸21-4	20-4	20-4	22
16	20-2	19-6	19-6	23
3	20	▸19-6	20	24
	HOLIDAY			25
		19-6	22	26
26		.26	29-1	
5	22	20-6	20-6	29
20	20	19-9	20	30
24	21	19-6	19-6	31
49				

EARN

DIV

JAN	-	JUL	-	
FEB	-	AUG	-	
MAR	-	SEP	-	
APR	-	OCT	-	
MAY	-	NOV	-	
JUN	-	DEC	-	
NOV	-	MAY	-	
DEC	-	JUN	-	
JAN	-	JUL	-	
FEB	-	AUG	-	
MAR	-	SEP	-	

1969		Volume	Hi	Lo	Close	Change
October	1		**			
	2		**			
	3		**			
	6	505	50	50	50	-5
	7	137	55	55	55	-
	8		**			
	9		**			
	10		**			
	13		**			
	14	326	55	55	55	-
	15		**			
	16		**			
	17		**			
	20		**			
	21		**			
	22		**			
	23		**			
	24	195	52	52	52	-3
	27		**			
	28		**			
	29		**			
	30	450	50	50	50	-2
	31		**			
December	1		**			
	2	305	44	42	42	-3
	3	460	43	43	43	-2
	4		**			
	5	100	43	43	43	-
	8		**			
	9		**			
	10		**			
	11	170	43	43	43	-
	12		**			
	15		**			
	16		**			
	17		**			
	18		**			
	19		**			
	22		**			
	23		**			
	24		**			
	25		- Holiday -			
	26		**			
	29		**			
	30	200	43	43	43	-
	31	200	45-1/2	45	45-1/2	+2-1/2

1969		Volume	Hi	Lo	Close	Change
November	3		**			
	4		**			
	5		**			
	6	185	50	50	50	-
	7		**			
	10	1,587	52	50	50	-
	11		**			
	12		**			
	13		**			
	14	150	49	49	49	-1
	17		**			
	18	116	48	48	48	-1
	19	100	47	47	47	-1
	20		**			
	21	170	45	45	45	-2
	24		**			
	25		**			
	26		**			
	27		- Holiday -			
	28		**			

** No Trading

1970

1970

CHRIS-CRAFT INDUSTRIES

1.40 CV PFD

1970		Volume	Hi	Lo	Close	Change
January	1		- Holiday -			
	2		**			
	5	200	47	46	47	+1-1/2
	6	350	46-3/4	45	46-3/4	-1/4
	7		**			
	8	207	45-1/4	45-1/4	45-1/4	-1-1/4
	9	175	46	46	46	+3/4
	12		**			
	13		**			
	14	100	45-1/2	45-1/2	45-1/2	-1/2
	15		**			
	16	217	45-1/4	45-1/4	45-1/4	-1/4
	19		**			
	20	100	46	46	46	+3/4
	21		**			
	22		**			
	23		**			
	26	398	46	45	46	-
	27		**			
	28		**			
	29	401	46	45-1/2	45-1/2	-1/2
	30		**			
March	2		**			
	3	146	42	42	42	-3
	4	230	41-1/2	41	41	-1
	5		**			
	6		**			
	9		**			
	10		**			
	11		**			
	12		**			
	13		**			
	16		**			
	17	155	39	39	39	-2
	18		**			
	19		**			
	20		**			
	23		**			
	24		**			
	25		**			
	26		**			
	27		- Holiday -			
	30	120	34	34	34	-5
	31		**			

* No Trading

1970		Volume	Hi	Lo	Close	Change
February	2		**			
	3		**			
	4		**			
	5		**			
	6		**			
	9	230	45	45	45	-1/2
	10	100	45	45	45	-
	11		**			
	12		**			
	13		**			
	16		**			
	17	133	45	45	45	-
	18	477	45-1/2	43	43	-2
	19	100	43	43	43	-
	20		**			
	23		- Holiday -			
	24	300	43	43	43	-
	25	565	45	45	45	+2
	26		**			
	27		**			

1970

BANGOR PUNTA CORP

VOL	HIGH	LOW	CLOSE
94	>11-4	11-1	11-1
48	11-2	11	11-1
34	11-1	>11	11-1
194	1.48		17
209	>11-2	10-4	10-7
47	11	10-1	10-4
88	10-7	>10-7	10-4
74	11	10-4	10-7
74	11	10-6	11
498	1.37		10-4
81	>11-2	11	11
48	11	10-6	11
97	11-1	10-6	10-6
92	10-6	10-1	10-1
68	10-6	>10	10-6
878	1.10		10-1
74	>10-7	10-6	10-6
77	10-6	10-1	10-1
91	10-7	10	10
89	10-7	10	10
76	10-1	>9-6	9-6
180	1.11		10-6
79	10-1	9-6	9-7
96	>10-2	9-6	9-6
68	9-7	9-7	9-7
36	9-7	9-6	9-6
78	9-6	>9-7	9-7
219	1.29		10-1
68	>9-1	8-6	8-6
88	8-6	>8-1	8-1
112	8-6	8-7	8-6
96	8-7	8-6	8
96	8	8-6	8-6
948	1.29		10-7
48	>8-7	8-1	8-1
150	8-6	>7-1	7-7
27	8	7-6	7-7
36	8	7-6	7-6
43	8	7-7	7-7
382	1.11		10-1
48	>8-2	7-7	8
17	8-1	7-7	8-1
22	8	7-6	7-6
53	7-6	7-1	7-6
21	7-6	>7-1	7-6
153	1.19		10
75	7-6	7-1	7-2
54	7-6	>7	7-2
48	8-1	7-6	8-1
82	>8-6	8-1	8-6
51	8-2	8-6	8-6
262	1.28		13-6
65	9	>8-1	8-7
48	8-7	8-6	8-6
217	>8-7	8-6	8-7
105	8-7	8-6	8-6
79	8	8-6	8-7
456	1.26		13-2
57	>8-6	8	8-2
79	8-6	8-1	8-2
19	8-2	8	8-2
9	8-2	8-1	8-2
83	8-2	>7-7	8-1
153	1.21		13
15	8-2	7-6	7-6
69	8-2	>7-6	8
24	>8-7	7-7	7-7
18	8	7-6	7-7
12	8-2	8-1	8-2
174	1.18		12-5
9	>8-2	8	8
24	8-1	7-6	7-6
47	7-6	7-7	7-7
29	7-7	7-1	7-1
35	7-7	7	7
144	1.03		17-2
61	7-1	7	7
37	7	6-6	6-6

1970

PHOTO-CRAFT INDUSTRIES

VOL	HIGH	LOW	CLOSE	
45	8-7	8-6	8-7	6/1
94	8-7	8-6	8-6	2
84	>9	>8-6	8-6	3
225	1.10		11	
62	8-6	8-6	8-6	6
109	8-7	8-2	8-3	7
111	8-6	8-2	8-6	8
123	8-7	>8-2	8-7	9
162	>9	8-6	9	10
556	1.12		10-7	
58	>9	8-6	8-7	13
71	8-6	8-2	8-6	14
83	8-6	8-2	8-6	15
28	8-6	8-6	8-6	16
58	8-6	>8-2	8-6	17
290	1.19		10-6	
37	>8-6	8-3	8-6	20
76	8-6	8-1	8-6	21
99	8	7-6	7-6	22
283	7-3	6-7	7	23
229	7-1	>6-6	6-6	24
635	.93		10-6	
98	7-2	>6-7	7-2	27
44	7-6	7-1	7-1	28
68	7-7	7-2	7-6	29
111	>8-6	7-2	7-2	30
68	7-6	7-3	7-6	5/1
391	.98		10-2	
186	>7-6	7	7	4
45	7-3	7	7-1	5
123	7-6	>6-6	7	6
218	7-2	7	7-1	7
14	7-2	7-1	7-1	8
586	.99		10	
51	>7-3	7	7-2	11
49	7-1	6-6	7	12
31	7	6-5	7	13
268	7	6-6	7	14
239	6-7	>6-2	6-6	15
538	1.02		9-7	
128	>7	6-6	6-6	18
25	7	6-5	6-5	19
57	6-7	6-2	6-6	21
183	6-6	6-1	6-6	21
128	6-6	>6	6-2	22
433	.98		9-5	
152	>6-3	5-1	5-1	25
175	5-6	5	5	26
258	5-2	>4-6	5-2	27
219	5-4	5-2	5-3	28
178	6-6	5-6	6-6	29
478	.78		8-3	
139	6-1	>5-6	6-1	6/1
128	6-3	6	6-3	2
147	6-6	6-3	6-6	3
95	>7-2	6-5	7	6
180	6-6	6-6	6-2	9
606	.98		8-1	
35	>6-6	6	6	8
89	6-2	5-6	5-7	9
34	6	5-7	6	10
48	6	5-6	5-6	11
76	6-2	>6-6	6-7	12
276	.88		8-2	
37	6-1	>5-6	6	15
263	6-2	5-7	6-1	16
88	6-3	6-1	6-1	17
99	6-2	6-1	6-1	18
166	>6-6	6	6-6	19
667	.86		8-6	
98	>6-6	6-1	6-3	22
174	6-3	>5-6	5-6	23
72	5-7	5-6	5-7	24
32	6	5-6	5-6	25
44	6-7	6-6	6-6	26
388	.83		8-6	
35	6	5-5	6	29
29	6	5-5	5-5	30

1.40 CV PFD

VOL	HIGH	LOW	CLOSE
		17-1	18
9	17-2	>17-2	17-2
3	>17-3	17-3	17-3
12	2.10		22-2
		17-1	18-2
6	>17-2	17-2	17-2
1	17-2	17-2	17-2
		17	18-6
8	17-2	>17	17
13	2.45		22-1
		17	18-6
		16-1	18-7
		16	18-7
		16-4	18-4
1	>17	>17	17
1	2.38		21-7
3	>17	17	17
4	17	17	17
4	16-7	16-4	16-4
3	15	15	15
2	15	>15	15
15	2.00		21-3
6	16-4	15-2	15-2
2	15-2	>15-2	15-2
		15-1	17
6	>17	17	17
		15-4	17
17	2.[illegible]		21-1
		15-4	17
1	15-4	15-4	15-4
18	>15-6	14-2	14-2
		14-1	17
9	14-2	>14-1	14-1
22	2.37		20-7
2	14-4	14-4	14-4
1	>15-2	15-2	15-2
		14-2	17
9	14-2	>14	14
		13-4	17
8	2.84		20-3
1	>15	15	15
		14-4	15
8	14	13-4	13-4
3	14	>13-5	14
7	14-7	14-7	14-7
19	2.10		28
9	>15	14	14
7	13	12	12
8	12	11-1	11-7
1	11	>11	11
3	12-4	12	12-6
22	1.41		19-1
9	>14-2	13-4	14-2
		12	14-4
1	14-1	14-1	14-1
		14	17
12	13-2	>12-4	12-4
15	2.41		19-2
		12-6	15-4
		12	14
		12	12-4
		12	12-4
2	>12-4	>12-4	12-4
2	1.83		18-6
		12	13-4
		12	14
		12	14
2	12-1	>12-1	12-1
2	>12-3	12-3	12-3
4	1.78		20-3
2	12-2	12-2	12-2
1	12	12	12
1	11-5	>11-5	11-5
1	12-4	12-4	12-4
3	>13-2	11-2	11-2
8	1.88		18
9	12-2	12	12-2
9	12-2	12-2	12-2

1970		Volume	Hi	Lo	Close	Change
April	1	100	25-1/4	25-1/4	25-1/4	-8-3/4
	2		**			
	3		**			
	6		**			
	7		**			
	8		**			
	9		**			
	10		**			
	13		**			
	14		**			
	15		**			
	16		**			
	17		**			
	20		**			
	21	200	21	21	21	-4-1/4
	22		**			
	23		**			
	24		**			
	27	100	21	21	21	-
	28		**			
	29		**			
	30		**			
June	1	102	14-3/4	14-3/4	14-3/4	+2-3/4
	2	100	15	15	15	+1/4
	3	400	15-1/2	13-1/4	15-1/2	+1/2
	4		**			
	5		**			
	8		**			
	9		**			

1970		Volume	Hi	Lo	Close	Change
May	1		**			
	4		**			
	5		**			
	6		**			
	7		**			
	8		**			
	11		**			
	12		**			
	13		**			
	14	100	18	18	18	-
	15		**			
	18	100	14	14	14	-4
	19	100	15	15	15	+1
	20		**			
	21	100	13-1/2	13-1/2	13-1/2	-1-1/2
	22		**			
	25	100	15	15	15	+1-1/2
	26		**			
	27	120	15	15	15	-
	28		**			
	29	100	12	12	12	-3

660A

* After August , 1969, Piper traded on the Philadelphia-Baltimore-Washington Stock Exchange, for which ISL Index figures are unavailable. Accordingly, figures taken from The Wall Street Journal on a daily basis are supplied following each page of CC and BP statistics.

** No Trading

Revised 12/18/70

205. [Proposed by Chris-Craft] The Piper PA-30 Twin Comanche aircraft ("Twin Comanche") was introduced to the Piper line in 1963. The Twin Comanche was developed by modification of the single engine Comanche, was priced below all competitive twin engine aircraft and by January 1966 outsold all other twin-engine aircraft on the market. From 1963 through 1969 Piper sold approximately 1,950 Twin Comanches, representing over 10% of Piper's total dollar sales for the period 1963 through 1969. The annual reports did not specify the dollar sales for the Twin Comanche, either annually or cumulatively, except as set forth in the 1964 and 1965 annual reports quoted in Findings 216 and 217.

206. [Proposed by Chris-Craft] A report [Chris-Craft Exhibit 69] prepared by F. Strickland, a Piper engineer, on or about March 19, 1962, stated:

at page 4

"PURPOSE:

The purpose of this report was to show the results of the preliminary flight test work on the PA-30 and to point out the major items of CAR non-compliance of the airplane."

at page 12, reporting "the test pilot's personal views of the airplane"

"PA-30 INITIAL TYPE INSPECTION STUDY

The following is a list of ground and flight checked items which are considered of such importance as to constitute non-compliance with the CAR/CAM provisions.

A. Flight Section of the Flight Test Report

2. It is impossible to hold the airplane within the roll and yaw limits of 15° by normal control use. In most configurations it is impossible to produce and correct roll and yaw by unreversed use of controls, until the airplane pitches.

* * *

5. Critical engine inoperative, power-on stalls could not be investigated because the left yaw could not be stopped with full right rudder." [Chris-Craft Exhibit # 69]

New 12/18/70

663 A

206A. [Proposed by Piper] The report referred to in Finding 206 was a report of a flight test on a basic PA-24 (single-engine Comanche) airframe, N5808P, with two engines installed. Said aircraft did not have the configuration used on the final aircraft known as the PA-30 Twin Comanche, N7000Y, and certified by the FAA in early 1963.

207. [Proposed by Chris-Craft] In a Statement of Conformity of the Civil Aeronautics Administration ("CAA")* dated February 5, 1963, the Twin Comanche was certified to have been manufactured in conformity with the type design data forming the basis for the type certificate for the PA-30 with the exception of:

> "Test equipment necessary for conducting FAA flight tests.
>
> "Minor non-conformities which do not affect the airworthiness of the aircraft."

The aforesaid Statement of Conformity was signed by J. W. McNary, Assistant Chief Engineer of Piper Aircraft Corporation. Mr. McNary, who was in charge of the Twin Comanche project at Piper, was also the CAA-designated manufacturer's certification representative at Piper, in which capacity he signed the Statement of Conformity for the Twin Comanche. Prior to issuing a Certificate of Compliance for the Twin Comanche, the FAA participated in the test program, reviewed the work referred to in the Type Inspection Report and flew the airplane. Based on the foregoing the CAA issued a Certificate of Compliance for the Twin Comanche in early 1963.

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* The CAA was the predecessor agency of the Federal Aviation Agency (the "FAA").

ALL

208. [Proposed by Chris-Craft] The Type Inspection Report for the PA-30 includes the attached reports covering flight characteristics of PA-30 number N7000Y determined for the conditions stated in the respective reports and based on flight tests conducted on November 27, 1962.

SECTION V. HANDLING QUALITIES:

E. Flight Characteristics:

2. Most Rearward C.G. Condition at Maximum T-O. Weight:

3.120 g. Power On Stall Characteristics:

3.120-1

3.120-2 (1) Conditions

(a) Hp 5000 Ft. (b) OAT 46 °F

(c) Engines at 2690 in.Hg. 24.2 RPM

Power setting for airplanes over 6000 lbs. should not be less than that required to show compliance with normal climb requirements (CAR 3.85(a)), or with 90% M.C. power for airplanes 6000 lbs. or less.

* B 85 L 67.

		Gear retracted Flaps retracted	Gear extended Landing flaps 27°
(2) Trim speed 1.5Vs1	(MPH-IAS)	109	100
(3) Trim speed 1.5Vs1	(MPH-CAS)	109	100
(4) Prior to stall is speed reduced at rate not greater than 1 MPH per second?		Yes ~~No~~	Yes ~~No~~
(5) Speed at which 1 MPH/SEC. first obtained	(MPH-IAS)	80	80
(6) Stall speed	(MPH-IAS)	61	57
(7) Stall speed	(MPH-CAS)	61	57
(8) Is stall limited by control stop?		No ~~XXXXX~~	No ~~XXXXX~~
(9) Maximum roll	(degrees)	10	12-15
(10) Maximum yaw	(degrees)	15	15-10
(11) Maximum pitch below level	(degrees)	10	8
(12) Altitude lost •	(feet)	50	100
(13) Maximum IAS during recovery	(MPH)	95	90
(14) Maximum CAS during recovery	(MPH)	95	90
(15) Maximum acceleration during recovery	(G)	2	2

* L 71 B 65

(16) Controllability	Good	Fair	Poor	Unsatisfactory
(a) Longitudinal:	√			
(b) Lateral:	√			
(c) Directional:			√	

• Difference in altitude as measured on sensitive altimeter from moment airplane pitches to altitude at which horizontal flight is regained.

B - Buffet Warning - MPH

L - Stall Warning Light - IAS

SECTION V. HANDLING QUALITIES:

1. Flight Characteristics:
2. Most Rearward C.G. Condition at Maximum T.O. Weight:
   a. Power On Stall Characteristics: (continued)

(17) For airplanes with independently controlled bank and yaw control, is it possible to produce and to correct roll and yaw by unreversed use of aileron and rudder controls up to time airplane pitches?..... Yes

(18) For 2 control airplanes, is it possible to produce and to correct roll by unreversed use of the rolling control without producing excessive yaw up to time airplane pitches?..... NA

(19) Is buffeting violent at the stall?..... No

(If "yes", describe under "REMARKS")

(20) Does a clear and distinctive stall warning begin between 5 and 10 m.p.h. above stalling and continue until stall occurs?..... Yes

(21) During recovery:

(a) Is it possible to prevent more than 15° roll or yaw by normal control use?..... Yes

(b) If loss of altitude is over 100 feet, is this information in the AFM, on a placard, or listing?... NA

(c) If pitch is over 30° below level, is this information in the AFM, on a placard, or listing?..... NA

(22) Is buffeting at any speed above the stall severe enough to interfere with the satisfactory control of the airplane or cause structural damage or excessive fatigue to the crew?..... No

REMARKS

Sect. V R 2a (17)

Use right rudder at stall gear and flaps extended.

SECTION V. HANDLING QUALITIES:

668 A

RK

E. Flight Characteristics:

2. Most Rearward C.G. Condition at Maximum T.O. Weight: (continued)

3.121 r. Stall Characteristics From Excessive Climb Attitude •

3.121-1 (3-5)

(1) Conditions

(a) Hp 6500 Ft.

(b) OAT 44 °F

(c) Engines at 23.5 in.Hg. 2690 RPM

Power used, if any, to achieve the critical "excessive climb or nose high attitude".

		Gear Retracted Flaps Retracted		Gear Extended Landing Flaps 27 •	
		Power On	Power Off	Power On	Power Off
(2) Trim speed approximately 1.5Vs1	(MPH-IAS)	109	109	100	100
(3) Trim speed approximately 1.5Vs1	(MPH-CAS)	109	109	100	100
(4) Approx. climb attitude to horizontal (Should be as high as practicable)	(degrees)	30-35	20	20-25	25
(5) Rate of approach (last 20 mph) (Should be as high as practicable)	(MPH/SEC)	3-5	3-5	3-5	3-5
(6) Stall speed	(MPH-IAS)	58	68	52	58
(7) Stall speed	(MPH-CAS)	58	68.5	52	58
(8) Maximum roll	(degrees)	5	0-5	20	0-5
(9) Maximum yaw	(degrees)	5	0-5	20	0-5
(10) Maximum pitch below level	(degrees)	15	30	20	25
(11) Altitude lost ••	(feet)	250	400	220	35
(12) Maximum IAS during recovery	(MPH)	110	105	105	95
(13) Maximum CAS during recovery	(MPH)	110	105	105	95
(14) Maximum acceleration during recovery	(G)	2	2	2	2

• See Section V-3a(9) for one engine inoperative power on stalls

•• Difference in altitude as measured on sensitive altimeter from moment airplane pitches to altitude at which horizontal flight is regained.

SECTION V. HANDLING QUALITIES:

E. Flight Characteristics:

2. Most Rearward C.G. Condition at Maximum T.O. Weight:

F. Stall Characteristics From Excessive Climb Attitude: (continued)

(15) Controllability	Good	Fair	Poor	Unsatisfactory
(a) Longitudinal:	✓			
(b) Lateral:	✓			
(c) Directional:	✓			

(16) Is buffeting violent at the stall?..... No Yes

(17) Are the recovery speeds greater than V_{MC}?..... No Yes

(18) Are the recovery maximum accelerations greater than the limit positive maneuvering load factor for which the airplane was designed?..... No Yes

(19) Describe stall warning and buffeting:

The stall warning begins with a gentle buffeting approximately 10-15 MPH. before the stall increasing in intensity as the stall is approached.

The buffet is quite heavy at the stall.

209. [Proposed by Chris-Craft] Piper's 1963 Annual Report sent to Piper's shareholders, the SEC and the NYSE during January 1964 stated at pages 7 and 8:

> "The latest of Piper's fine twin engine models is the 4 place Twin Comanche. At $33,900 in the standard configuration, the Twin Comanche is priced more than $5,000 below its closest major competitor and $15,000 below any airplane close to it in performance. The Twin Comanche is powered by two fuel injected 160 HP engines, and cruises at almost 200 MPH with a range of well over 1,000 miles. It could very well prove to be the finest and most efficient twin engine airplane of its class ever produced in this country."

DLC

210. [Proposed by Chris-Craft] A telegram dated September 2, 1964 from P. A. Gibson, Chief, Engineering and Manufacturing Branch, Flight Standards Division, Federal Aviation Agency - Eastern Region, to Piper (Attention Mr. McNary), stated:

WU007 NL PD EAST NORTHPORT NY SEP 2
PIPER AIRCRAFT CO (SENDER AAITING REPLY)
ATTN WILLIAM MCNARY LOCK HAVEN PENN
REFERING TO YOUR AUGUST 20 LETTER OUR REQUEST TO CONDUCT ADDITIONAL PRODUCTION PA-30 FLIGHT TESTS WAS MADE IN THE INTEREST OF SAFETY. CONSIDERING THE NUMBER OF PA-30 ACCIDENTS AND UNFAVORABLE CHARACTERISTICS REPORTS WE WERE ESPECIALLY ANCIOUS TO OBTAIN OPINIONS FROM SEVERAL PILOTS, BECAUSE OF THE URGENCY OF THIS MATTER AND YOUR REFUSAL TO COOPERATE WITH US WE CONDUCTED TESTS IN A RENTED AIRCRAFT UTILIZING THREE EASTERN REGION FAA FLIGHT TEST PILOTS THEIR UNANIMOUS FINDINGS IS THAT THE PIPER PA-30 DOES NOT COMPLY WITH SECTION 3.120 OF THE CIVIL AIR REGULATIONS PART THREE THEREFORE WE ARE FORMING A MULTIPLE OPINION BOARD TO EVALUATE AT YOUR FACILITY THE PA-30 FLIGHT CHARACTERISTICS AND REQUEST THAT YOU MAKE AVAILABLE ONE PRODUCTION AIRCRAFT AND ONE AIRCRAFT EQUIPT TO CONDUCT SPIN TESTS PLEASE ADVISE US BY RETURN WIRE IF YOU INTEND TO HONOR THIS REQUEST AND IF SO WHEN THE AIRCRAFT WILL BE AVAILABLE
P A GISXXX GIBSON CHIEF ENGINEERING AND MFG BRANCH FEDERAL AVN AGCY
843A EDT [Chris-Craft Exhibit # 73]

WESTERN UNION TELEGRAM
WESTERN UNION TELEGRAM
WESTERN UNION TELEGRAM

211. [Proposed by Chris-Craft] A further telegram from Mr. Gibson to Piper dated September 11, 1964 stated:

> "AN FAA MULTIPLE EXPERT OPINION TEAM HAS FOUND THE PIPER MODEL PA-30 AIRCRAFT TO BE NOT IN COMPLIANCE WITH CAR 3.120(c) AND 3.118(a)(2) IN THAT AN EXCEPTIONAL DEGREE OF SKILL AND ALERTNESS IS REQUIRED TO PREVENT MORE THAN A 15 DEGREE ROLL DURING RECOVERY FROM A POWER-ON STALL WITH FLAPS EXTENDED, AND IN THAT THE LATERAL STABILITY IS NEGATIVE AT 1.2 WITH THE FLAPS EXTENDED. YOU WILL BE FURNISHED A WRITTEN REPORT OF THE TEAM FINDINGS, IN ACCORDANCE WITH FSP 8110.1. YOU ARE REQUESTED TO PROVIDE THIS OFFICE WITH INFORMATION NECESSARY FOR THE ISSUANCE OF AN AIRWORTHINESS DIRECTIVE CORRECTING THE NON-COMPLIANCES. YOU ARE INVITED TO SUGGEST TO THIS OFFICE A NOTICE TO BE SENT TO ALL PA-30 OWNERS ALERTING THEM TO WHICH SHOULD BE AVOIDED PENDING THE ACCOMPLISHMENT OF CORRECTIVE MEASURES. YOUR SUGGESTION SHOULD BE COMMUNICATED TO US PRIOR TO SEPT. 15."
> [Chris-Craft Exhibit # 74]

211A. [Proposed by Piper] A later telegram from Mr. Gibson to Piper (Attention Mr. McNary) dated October 7, 1964 stated:

1964

WU001 PD WUX JFK INTL AIRPORT NY OCT 7 537P EDT
PIPER AIRCRAFT CORP, ATTN J W MCNARY
LOCK HAVEN PENN
PLEASE RETURN OUR SEPTEMBER 11 MESSAGE REGARDING PA-30 STALLS AND STABILITY. WE WILL ADVISE YOU OF ANY FURTHER NECESSARY ACTION AFTER WE HAVE RECEIVED CLARIFYING INFORMATION FROM OUR WASHINGTON OFFICE
P A GIBSON EA-210 072000 FAA FED BLDG JFK INTL ARPT
11 PA-30 EA-210 072000 821A EDT

212. [Proposed by Chris-Craft] A flight test data sheet dated September 15, 1964 from the files of Piper stated "Purpose: to see if average pilot can perform power on stalls and stay within FAA limits", and except for data with respect to fuel, gross weight, center of gravity and configuration, stated:

> "Two 'average' pilots were selected. # 1 Paul Everley. 4 clean and 4 dirty power on stalls were completed and all were very good and within tolerance, (15° or less roll & 15° or less yaw). However, it was noted that 50 lbs additional required ballast was under the co-pilot seat rather than the pilot seat where it belonged. This ballast was changed over to the pilot seat during flight and the dirty power on stalls tried again. 6 were tried and none were within tolerance. # 2 pilot Ferb Micholes only managed 2 out of 15 tries." [Chris-Craft Exhibit # 76]

212A. [Proposed by Piper] As stated by the FAA in the letter quoted in Finding 213 , compliance of the aircraft with the Civil Air Regulations may be demonstrated for the maneuvers described in Finding 212 by a pilot utilizing an exceptional degree of skill, alertness or strength.

213. [Proposed by Chris-Craft] In a letter dated December 28, 1964 from Mr. Gibson to Piper (Attention Mr. McNary), the following was included:

> "This is in reference to our September 11, 1964, telegram, which reported the findings of a Federal Aviation Agency multiple expert opinion team regarding flight characteristics of the Piper Model PA-30 aircraft. Our telegram was nullified during my September 15 telephone conversation with your Mr. McNary, because of the need for an interpretation of regulations upon which the team findings were based.
>
> "We have received information from our Washington headquarters which indicates that compliance with the requirements of Civil Air Regulations Part 3, paragraph 3,120(e), may be demonstrated by a pilot utilizing an exceptional degree of skill, alertness, or strength. The team's finding of non-compliance with Paragraph 3.120(e) was, therefore, not in accord with the intent of the regulation and cannot be considered valid.
>
> "Although PA-30 compliance with 3.120(e) can be shown by an exceptionally skillful and alert pilot, we cannot ignore the fact that several instances of inadvertent spinning from practice stalls have been reported, usually by pilots who were relatively inexperienced in the PA-30. Paragraph 3.735 of Part 3 requires that information necessary for safe operation of an aircraft be made available to the crew. We are of the opinion that an operating limitation could be imposed (such as a prohibition against practice stalls in a climbing attitude, or above certain power settings) which would provide a level of safety for the PA-30 pilot consistent with his skill level. This kind of limitation would be similar to the restriction against spinning normal category aircraft even though the aircraft may have been required to meet spin requirements during type certification testing. Your comments are requested." [Chris-Craft Exhibit # 75]

ALL

216. [Proposed by Chris-Craft] Piper's 1964 Annual Report sent to Piper's shareholders, the SEC and the NYSE during January 1965 stated at pages 6 and 7:

> "The most important contribution to the increase in Piper sales in 1964 was made by the Twin Comanche, a new addition to the product line, which was developed late in the 1963 fiscal year. Production and deliveries throughout the year held steady at 2 Twin Comanches daily, and increased the dollar volume by approximately $10,700,000, while reducing the sales of Apache 235's and Comanche 250's only to a much lesser extent. The Twin Comanche is approximately $6,000 lower in price than its nearest competitor, and substantially higher in performance. It is a very popular airplane and has been well received by private owners and corporations alike."

At page 13 it stated, in part:

> "* * * During the fiscal year, a total of 460 Twin Comanches were delivered, considered to be the largest number of any one commercial model of twin engine airplane to be delivered by the company in one year."

ALL

217. [Proposed by Chris-Craft] Piper's 1965 Annual Report sent to Piper's shareholders, the SEC and the NYSE during January 1966 stated at page 6:

> "The 3,818 planes delivered in 1965 represent an increase of 30% in units over the previous year. Of particular interest is the substantial increase in the higher priced Aztec model and in the Comanche models. These airplanes accounted for an approximate increase of ten million in the dollar volume. 1965 sales of Twin Comanches remained at a high level even in comparison with 1964 when the Twin Comanche was a new model and a higher than usual number were needed by the dealer and distributor organization for demonstrators and warehouse stocking."

At page 12, beneath a photograph of a Twin Comanche:

> "TWIN COMANCHE B
>
> Regular four place seating can now be augmented with two family seats. An airplane so appealing that, since introduction, it has outsold all other twin-engine airplanes on the market."

Revised 12/18/70

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218. [Proposed by Chris-Craft] In November 1966 the National Aeronautics and Space Administration ("NASA") issued a report entitled "An Evaluation of the Handling Qualities of Seven General - Aviation Aircraft" [Chris-Craft Exhibit # 89]. The first page of that report, entitled "Summary", included the following statement:

> "A quantitative and qualitative flight-evaluation program has been conducted on seven late-model general-aviation aircraft.
>
> "The quantitative portion of this program indicated that the aircraft, as a class, have generally satisfactory stability and control characteristics. However, these characteristics are degraded with decreasing airspeed, increasing aft center of gravity, increasing power, and extension of gear and flaps.
>
> "The qualitative portion of the program showed that the handling qualities are generally satisfactory during visual flight and during instrument flight in smooth air. Atmospheric turbulence degrades these handling qualities, with the greatest degradation noted during instrument landing system approaches. Such factors as excessive control-system friction, low levels of static stability, high adverse yaw, poor Dutch roll characteristics, and control-surface float combine to make precise instrument tracking tasks, in the presence of turbulence, difficult even for experienced instrument pilots.
>
> "The program revealed three characteristics of specific airplanes that are considered unacceptable if encountered by the inexperienced or unsuspecting pilot: (1) a violent elevator force reversal at reduced load factors in the landing configuration, (2) power-on stall

characteristics that culminate in rapid rolloffs and/or spins, and (3) neutral-to-unstable static longitudinal stability at aft center of gravity.

"A review of existing criteria indicated that the criteria have not kept pace with aircraft development in the areas of Dutch roll, adverse yaw, effective dihedral, and allowable trim changes with gear, flaps, and power. This study indicated that criteria should be specified for control-system friction and control-surface float."

At page 8 of the NASA report, it stated:

"Lateral-directional trim changes with airspeed become appreciable at low speed (high angle of attack) at constant power. Data for an aircraft with highly unsatisfactory characteristics are shown for the maximum-power cruise and landing configurations in figures 9(a) and 9(b), respectively. These figures illustrate the large amounts of rudder control required to maintain wings-level constant-heading flight near the stall. This characteristic presents the pilot with a symmetric power minimum control speed that causes a significant problem when stalling the aircraft. Comparison of figure 9(b) with figure 9(a) shows that both configurations required maximum available rudder just prior to the stall; however, the rudder required to maintain heading in the landing configuration is generally greater at speeds below 80 knots.[1]

[1]Comparison of hangar calibrations with manufacturer's specifications showed that the rudder was misrigged on this airplane such that maximum rudder throw was 5° right and 7° left less than specified--a condition which aggravated the situation described."

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At page 18, the NASA report stated:

> "Two of the aircraft tested have unacceptable power-on stall characteristics in the landing configuration. The lateral-directional trim changes of one aircraft show that the addition of power introduces a left yawing moment (fig. 8) and that the pilot must use full-right rudder to maintain heading when near the stall speed (fig. 9). The large yawing moment due to power coupled with the lack of rudder authority causes the aircraft to encounter an uncontrollable left roll/yaw motion at the stall. This motion places the aircraft in a spin that requires 600 feet to 1200 feet of altitude for recovery. All of the evaluation pilots exceeded the gear and flap placard speeds when recovering from this spin."

Mr. Jamouneau, Piper's Chief Engineer, read the aforesaid report sometime in 1967 and concluded that the characteristic "2" in the fourth paragraph of the first page of the NASA report quoted above referred to a Twin Comanche. At certain other portions of the report Mr. Jamouneau could deduce that a PA-30 was referred to by various drawings of the airplanes and various measurements of control travels and specifications.

A Piper memorandum dated November 28, 1967 from Richard Wible, Aerodynamics Department, to R. D. Ruder, a Piper engineer, stated that the portions of the report quoted

above and in Finding 218A below, among others, pertained to the Twin Comanche.

The NASA report at page 2 stated:

> "Seven different aircraft were included in the evaluation to assure that the measured handling qualities are representative of a class of aircraft rather than of an individual airplane. The stability and control characteristics of each aircraft were quantitatively documented and compared with pilot impressions of the aircraft's handling qualities. This paper summarizes the results of the evaluation and compares these results with current criteria considered to be applicable. Since the objectives were to evaluate handling qualities of the class of aircraft as a whole, characteristics documented herein have not been related to specific aircraft."

218A. [Proposed by Piper] The NASA report referred to in Finding 218 pointed out also stated: (page 18)

"Two of the aircraft were added when the program was near completion in order to assure inclusion of popular late-model aircraft with a high population index. In order to expedite this expansion, somewhat abbreviated programs (5 quantitative and 4 qualitative flights) were conducted on these aircraft." (at page 5)

"The control-surface rigging was not changed before the tests were made even though one aircraft did not have the maximum deflection specified by the manufacturer." (at page 6)

"Recording instrumentation was not installed in the two aircraft on which abbreviated flight programs were conducted. Instead, pilot display and hand-held indicating types of instruments were used as follows:

Parameter	Instrument	Estimated maximum error
Control-surface positions	Taped scales on controls	±3° (surface
Longitudinal control force	Hand-held force gage	±2 pounds
Directional control force	Rudder-pedal force gage	±20 pounds
Normal acceleration	Indicating normal accelerometer	±0.2g
Indicated airspeed	Airspeed indicator	±3 knots
Pressure altitude	Altimeter	±100 feet
Pitch attitude	Horizon (with side-window lines)	±3°
Bank angle	Artificial horizon	±3°

(at page 6)

"* * *It should be pointed out that asymmetric power stalls were not evaluated on all of the aircraft." (at page 18)

219. [Proposed by Chris-Craft] Piper's 1966 Annual Report sent to Piper's shareholders, the SEC and the NYSE during January 1967 stated, in part, at page 2:

> "* * * The top of the Piper line was rounded out by the Comanche, the Twin Comanche, the Apache 235, and the Aztec. The Twin Comanche and the Aztec are two of the most popular twin-engine airplanes in use around the world, and in the month of May 105 of these airplanes were delivered from the factory."

It stated, in part, at page 7:

> "Piper held the predominant position in the sale of multi-engine aircraft in the under $100,000 category. Even though a labor strike curtailed deliveries, there were 312 Aztecs and 315 Twin Comanches delivered during the 1966 fiscal year in the domestic market. The Piper twins were 9% higher than the nearest competitor, giving us a 43% share of the multi-engine market in the under $100,000 category."

220. [Proposed by Chris-Craft] On March 28, 1967 a meeting was held at the Civil Aeronautics Board where representatives of aircraft manufacturers were briefed on a report entitled "Aircraft Design - Induced Pilot Error". Piper was given a copy of said report with a key for the identification of Piper aircraft. In July 1967 the NTSB made copies of the report available to the public and in December 1967 made the identifier key available to the public. The said report stated, in part ["PA-30" is inserted after the code designation for the Twin Comanche]:

"G. Twin-Engine Airplanes

The number of stall accidents to twin engine airplanes is so small that a statistical distribution is of questionable value in comparing individual models. There were only seven accidents to the three airplanes in Group IIA; three to airplane 051, three to airplane 060, and one to airplane 030. The highest rate was of the order of 0.1 per 10,000 flying hours. With this small sample size, no valid conclusions can be drawn from a statistical analysis. Of the seven accidents, four occurred on take-off and two on initial climb for a go-around. Failure of one engine was involved in three of these accidents. The only other accident occurred in flight during single-engine practice on a dual instruction flight.

"For the airplanes in Group IIB there was a total of 21 accidents to the five models and the maximum number to any one model was five, so that there again, the sample size is too small for a Chi-Square analysis to be meaningful. Examination of accident rates, however, indicates a problem with airplane 027 [PA-30] which had a stall accident rate of 0.52 per 10,000 hours,

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as compared to 0.17 for the entire group. Of the five stall accidents to this model, three occurred during single-engine operation on instructional flights, two of which were solo and one a dual check for a multi-engine rating. In all three cases, the airplane entered a spin from which recovery was not effected. These accidents constituted 60% of the stall accidents, and 12% of all accidents to the model, yet instructional flying accounted for only 0.5% of the total usage.

"A review of 1965 and 1966 accident reports relating to this airplane discloses that the occurrence of stalls followed by a spin with this model during single-engine operation has continued. In many cases it has been found that the airplane crashed in a relatively flat spin. The problem of stalls and spins on airplane 027 [PA-30] with one engine inoperative was the subject of considerable analysis and flight testing in 1964, and it was concluded that the airplane met the requirements of FAR 23. Nevertheless, on a basis of the findings of this study and the continued occurrence of such accidents, it is recommended that the problem be restudied to determine the specific characteristics of airplane 027 [PA-30] which are responsible for its relatively high stall accident frequency, and that the adequacy of the certification requirements in FAR 23 be critically reviewed. The stall-accident rate of airplane 027 [PA-30], in comparison to that of other airplanes in the same usage group, as discussed below, indicates that this airplane, and hence the requirements, are not representative of the present state of the art." [Chris-Craft Exhibit # 78 - pp. 47-48]

With the exception of the review referred to in the last quoted paragraph, 1964 statistical data was used for the report.

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220A. [Proposed by Piper]. W. R. Fuchs, a Piper engineer, prepared the attached report in 1968 entitled "Comments on CAB Report on Design-Induced Pilot Error Accidents".

Movies of our spin tests do show that as the airplane spins the nose oscillates up and down, but this occurs in many planes and does not make recovery difficult. However, if the plane were in a spin and struck the ground at the instant the nose were at its highest point, the wreckage might give the false impression that the airplane had been spinning flat.

The airplane does not spin flat and it can be brought out of a spin using normal spin recovery technique if reasonable altitude is available.

Any high performance twin will be more critical when flown near the stall speed than a simple trainer. Pilots know this and expect it.

The FAA has studied the stall characteristics of this airplane four times and the spin characteristics twice. In each case it was agreed that the airplane meets the requirements and has no unsafe feature. An Air Safety Investigator of the CAB investigated slow-speed single-engine characteristics of the airplane in June of 1964 and had no complaint.

Our investigation indicates that the fundamental reasons why there may appear to be a lot of spin accidents in the PA-30 are:

1. Far more students are being trained for multi-engine ratings in PA-30s than in other twins.

2. The FAA flight test requirements (especially as published in the past) prescribe conditions which are perfect set ups for stall-spin accidents.

3. Often the pilots or instructors are not adequately qualified to fly the airplane or do what they attempt to do.

There are over 1600 PA-30s in use. This airplane costs less to buy, operate, or rent than any other complete twin. As a result, most students select this airplane for their training.

We believe that the FAA has contributed to the causes for PA-30 accidents because the FAA requires hazardous demonstrations for twin ratings. Recently, by changing the multi-engine flight test guide and issuing General Aviation Operations Alert Bulletin No. 67-5 and Advisory Circular No. 61-40, the FAA has taken steps to create fewer hazardous situations, but, as pointed out in the October issue of AIR FACTS, "the FAA flight test guide's passage on the demonstration of minimum control speed rather sets the stage for tragedy." This is a comment on the 1966 guide; the 1963 edition prescribed other more hazardous situations and is, in our opinion, largely responsible for the training accidents.

FAA flight examiners sometimes go beyond the guide and, in order to overtrain a little to ensure a student's passing his test, an instructor frequently goes beyond the examiner.

COMMENTS ON CAB REPORT ON DESIGN-INDUCED PILOT ERROR ACCIDENTS

By W. R. Fuchs 689A

On page 48 of the report it is stated that there were 5 stall accidents in the PA-30, three of which occurred during single-engine operation on instructional flights. It is stated that in two of these cases the pilot was solo. If the pilot was alone who was instructing him?

We were able to obtain the accident report for one of the solo accidents. In this case it appears that the student was practicing a single-engine landing with one propeller feathered and the gear down. The CAB attributed the accident to the pilot's failure to maintain flying speed during single-engine flight following intentional feathering of the right propeller. Here we have an unqualified pilot doing something he shouldn't be doing and using incorrect technique. Everyone who flies knows that if a pilot does not maintain sufficient speed, the airplane will stall - regardless of the airplane - and that if there is asymmetric thrust the plane will spin.

In another of the five accidents the CAB reported that the most probable cause was both engines quitting when the passenger turned the fuel off with his feet. Again, the pilot failed to maintain a safe flying speed and stalled. In this case the wing was covered with heavy frost, a lot of snow was found in the tail, and the airplane may not have been loaded within safe limits. Considering the load that was being carried, the airplane may have been tail heavy and this would have made stall prevention and recovery more difficult.

The report states that instructional flying accounted for "only .5% of the total usage" for the PA-30, but for 5% of the PA-23. We do not believe the CAB had any way to get this data accurately, and our estimate of the situation is that the PA-30 is used more for student instruction than any other twin because it is more economical to fly this twin than others.

The report states that "the airplane crashed in a relatively flat spin." There is insufficient evidence to substantiate this statement. In fact "flat spin" is not defined. If the author means that during a flat spin the nose remains at about the same attitude as for a shallow glide and cannot be brought out of the spin because of this, the statement is simply not true. Between Piper pilots and FAA test pilots, this airplane has been spun and observed about 100 times. Normal spin recovery technique has brought the airplane out of the spin every time and it has been determined that the airplane meets certification requirements. The airplane recovers normally even when the spin is entered using one engine. We even found no trouble in recovering when the single engine was permitted to develop power for nearly one turn.

Our tests with one and two engines operating showed no tendency on the part of the PA-30 to flatten out. We did not test with one engine only operating continuously in a spin. Any twin with only one engine operating will wind up pretty badly in a spin.

ATTACH TO FINAL REPORT
ENCLOSURE NO. 2

Instructors frequently are not qualified to give the instruction they are trying to give. We looked into nine accidents which the CAB asked us to investigate. Two of these did not involve training. Of the seven which involved instruction or practice, the instructor in five of these cases had 25 hours or less in the PA-30. In one case the instructor had 2.5 hours and in another 2.8 hours in this airplane. Obviously this is not sufficient experience. The airplane is being held responsible for the inadequancies of the instructors and pilots flying it.

The fact that spins are no longer being taught and that even instructors often have very little experience in spin recovery, certainly can be considered a contributing factor in these accidents.

The FAA team did spins to the left and right, with and without tip tanks, fuel in tip tanks and empty. Pilots from the operations division investigated the characteristics while flying through the multi-engine rating maneuvers. None of these pilots voiced disapproval of the airplane.

The report states that the stall-accident rate of the PA-30, in comparison to that of other airplanes in the same usage group, indicates that this airplane, and hence the requirements which the plane meets, are not representative of the present state of the art. We challenge the validity of this statement and maintain that if any of the other high performance twins were used as extensively for twin engine training it would have a similar record.

The unpublished comments of a group of pilots mentioned on page 49 is not significant. Pilots frequently exaggerate characteristics of an airplane.

221. [Proposed by Chris-Craft] Piper's 1967 Annual Report (page 6) stated the following under the title "Sales in Units":

	1967	1966	1965
"Super Cub	138	141	139
Pawnee	337	442	631
Cherokee Six	517	655	93
Cherokee	2,455	1,996	1,874
Cherokee Arrow	65	-	-
Comanche	138	260	365
Twin Comanche	303	375	316
Apache	-	7	13
Aztec	280	408	387
Navajo	69	-	-
Total Piper Sales	4,302	4,284	3,818
Estimated Industry Sales*	13,000	14,667	10,952
Piper's Percentage	33%	29%	35%

* Including only airplanes with a standard price under $200,000."

At page 5, beneath a photograph of a Twin Comanche: "This Twin Comanche clears the snow-capped mcuntains of Chile with room to spare."

At page 7 the 1967 Annual Report stated that "The Twin Comanche and Aztec led the entire industry last year in the light twin market. . . ."

No other statements are contained in the 1967 Annual Report with respect to the Twin Comanche.

221A. [Proposed by Piper] The attached letter and enclosures dated February 5, 1968 were sent by Piper to all Piper dealers:

[Chris-Craft Exhibit # 92]

693 A

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A. 17745
TELEX NAIMIS... AREA CODE 717 748-6711

CABLE ADDRESS: CUB

February 5, 1968

TO ALL PIPER DEALERS:

Various comments concerning the Twin Comanche's accident record have stemmed from a study made by the FAA covering 1964, but only recently completed and released. A study over a wider period provides a true and meaningful picture and clearly shows that the Twin Comanche accident rate has actually experienced a remarkable improvement since the plane's first full year of use in 1964.

The Twin Comanche is in fact an outstanding new concept in aircraft design and efficiency. It is a clean, fast, multi-engine airplane with an acquisition cost and operating cost within the range of the high priced single engine. Its ownership comes primarily from the single engine pilots. In addition, it is used extensively for multi-engine training for the same reasons. Extensive knowledge and experience of operation now prevails and the safety record has improved significantly.

In aviation history there is precedent for such a record. A similar situation was the introduction of the first clean, fast, single engine airplane to the public in the late 1940's. It was a number of years before this type was operated with a reasonable safety record.

The Twin Comanche record is as follows:

RATE OF FATAL ACCIDENTS PER 100,000 HOURS USE (18,000,000 MILES)

YEAR	TRAINING OR PRACTICE ACCIDENTS	TOTAL ACCIDENTS	RATE - TOTAL ACCIDENTS
1964	3	9	9.3
1965	3	8	3.7
1966	1	10	3.2
1967	5	11	2.75

t is clear in the above chart if we could reduce the training accidents the record of this particular airplane and other multi-engine aircraft would be substantially improved. The Twin Comanche is used for training more extensively than any other individual model according to the information we can compile. It can be rented at a lower cost to the student and this s probably the prime factor in creating the higher exposure rate of this model to multi-engine raining.

694 A

An exact breakdown of hours of use between training and other use is not available. The only manner in which we can obtain a rate to apply against the number of accidents for each category of use is to assume that during the life of the Twin Comanche fleet the same percentage of total fleet hours per year for instruction remains constant. Our knowledge of the use of the fleet would indicate this is a reasonable assumption. If the non-instruction accidents and the instruction accidents are each applied to the total fleet hours for each year, we can have a rate applied to a constant to determine if there is improvement in either category of use. When a fleet is constantly growing, a rate rather than number of accidents must be considered.

RATE OF FATAL ACCIDENTS PER 100,000 HOURS USE

YEAR	NON-TRAINING ACCIDENTS	RATE	TRAINING OR PRACTICE ACCIDENTS	RATE
1964	6	6.2	3	3.1
1965	5	2.3	3	1.4
1966	9	2.88	1	0.32
1967	6	1.5	5	1.25

This chart shows a steady improvement in both categories of use as compared to the total hours flown for the fleet when the four year period is considered. Like any form of transportation, there is room for improvement as long as there are accidents and many programs having long range benefits are continually in process.

TWIN COMANCHE FLITE CHARACTERISTICS

The 1964 report has been used irresponsibly without full information on the real facts concerning the Twin Comanche.

Not many people spin a multi-engine airplane, except test pilots and FAA engineering pilots. During routine engineering re-evaluation of the production Twin Comanche aircraft last summe we invited the FAA to participate. Over 100 spins of various types and CG loading were accomplished with complete satisfactory results. Vmc and stalls were investigated. The results were:

1. No tendency to flat spin.
2. Vmc speed as reported in the handbook, is correct.
3. No spin recovery difficulties experienced when positive recovery action is taken on the part of the pilot.
4. FAA summarized their findings in a letter to us as follows:
   "The FAA flight test inspectors noted no areas of non-compliance with the airworthiness regulations applicable to the PA-30 aircraft."

This information, coupled with the continually improving accident record is contrary to the impression left by the 1964 study.

SAFER MULTI-ENGINE INSTRUCTION

Training and practice accidents can be improved for multi-engine aircraft now, regardless of the type. The recent FAA Advisory Circular, No. 61-40 is an effort to bring training practices up-to-date for modern twin engine design. There has been a great variance in methods and requirements by both the instruction profession and the FAA inspectors.

Within your schools, we believe the attached procedures and information, along with the attached FAA Advisory Circular, can further enhance the opportunity to reduce accidents. Let's aim for ZERO accidents during multi-engine training.

Very truly yours,

PIPER AIRCRAFT CORPORATION

J. Willard Miller
Director of Marketing

WM/kl

Enclosures: FAA Advisory Circular, No. 61-40
Multi-Engine Instruction Recommendations

RECOMMENDATION FOR SAFER MULTI-ENGINE INSTRUCTION PROGRAM

Twin engine aircraft can be provoked into a spin-type maneuver, in which considerable altitude is lost before recovery can be effected, by slowing the aircraft to or below stall speed with one engine idled or feathered. This situation should be avoided especially at low altitudes, but the theory in instructing has been that engine-out operations should be practiced at low altitudes in order to obtain maximum power on the operating engine. FAA Advisory Circular 61-40 changes this theory.

A recap of the instruction accidents indicate they begin from a low altitude. Recovery from a low airspeed and speed control on one engine is an important part of training but such maneuvers should be practiced at altitudes high enough (suggest 5,000 feet) so that if a spin is entered inadvertently, recovery can readily be accomplished well above the 1500 feet mentioned in the FAA Circular.

It should be remembered that Vmc is, by definition, the minimum speed at which one can maintain directional control with the critical engine (usually the left) windmilling, gear up, flaps at take-off position, and full power on the other engine. Because engine power decreases with altitude, Vmc does likewise. At some altitude the minimum control speed and stall speed will be the same. In this case, at this speed, since the wing is stalled and full rudder is being used, any twin-engine airplane can be expected to enter a spin unless immediate recovery action is taken. Thus, in demonstrating or practicing Vmc, an instructor should discontinue a Vmc demonstration if he is approaching stall and not losing directional control.

Most any multi-engine airplane when fully stalled with one engine out will roll and yaw toward the dead engine and eventually fall into a spin. If, however, power is continued on the operating engine, the result can easily be a spin from which recovery is more difficult.

In one non-training accident, a loss of power occurred on take-off. In this case, the gear was never retracted, but the power loss came early enough so that the pilot could have cut both engines and landed safely straight ahead. It is always advisable to cut power and land straight ahead when circumstances allow. On the other hand, if a go around is necessary the gear and flaps must be retracted at once and proper speed control carefully exercised.

As a result of the studies of these accidents, Piper Aircraft makes the following recommendations:

1. Practice single engine operation and power-off stalls only at high altitudes.
2. Recovery from intentional spins in the PA-30 can be accomplished by immediately using the following procedure:
   (a) Retard both throttles to idle position.
   (b) Apply full rudder in the opposite direction to the spin.
   (c) Push control wheel full forward. While it is not necessary for recovery, the use of ailerons against the turn (ie. right

aileron if spin is left) will expedite recovery. Maintain controls in these positions until the spin stops.

(d) Neutralize rudder and ailerons.

3. Recover from dive with smooth back pressure on control wheel. No abrupt control movement should be used during recovery from the dive.

4. When demonstrating slow single engine maneuvers instructors should be prepared to reduce power on the operating engine while lowering the nose to gain airspeed, or as a final precaution, add power on the idling engine as necessary to maintain directional control. If the stall warning light comes on, or tail buffet is experienced, the wing is approaching a stalled condition, and the maneuver should be discontinued. If the situation is aggravated by continued back pressure on the wheel and rudder pressure a spin may occur. If the control wheel is pushed at the first indication of a stall the airplane will not stall or spin. Spin recovery, even when perfectly executed, always requires considerable altitude.

5. Past records show that most training accidents commence at a low altitude with one engine out and

feathered, and perhaps gear and flaps down. When practicing engine-out procedures, such as landings and climb-outs, below 5,000 feet, it is recommended engine-out be simulated rather than actual. If student cannot maintain proper airspeeds discontinue low altitude practice in favor of more speed control practice at high altitudes.

The Piper Twin Comanche is an excellent aircraft for training, transportation, and just pure flying enjoyment. Stalls or spins are not required and should not be executed in the Twin Comanche or any mult-engine aircraft. If, however, an inadvertent spin is entered in the PA-30, recovery can be accomplished by merely following procedures which are standard for all twin-engine aircraft.

end

700A

Federal Aviation Agency

AC NO: 61-40

CERTIFICATION: PILOTS AND FLIGHT INSTRUCTORS

EFFECTIVE: 9/14/67

ADVISORY CIRCULAR

SUBJECT: PERFORMANCE OF STALLS ON PILOT FLIGHT TESTS

1. PURPOSE. This circular advises flight test applicants and flight instructors of changes in the performance of stalls on flight tests for the issuance of pilot certificates and ratings, and recommends that training procedures be modified accordingly.

2. BACKGROUND. The number of serious stall and spin accidents during pilot training in high performance small airplanes is increasing. Since the institution of the procedures still in common use for flight instruction in stall recoveries, the stalling speeds and horsepower of airplanes generally used for flight instruction have more than doubled. Flight test requirements have been progressively modified with advances in airplane design, but are still inappropriate for the latest high performance types. Accordingly, FAA inspectors and pilot examiners have been directed to apply immediately the following procedures on stall demonstrations in small (12,500-pound and under) airplanes. Outstanding Flight Test Guides will be changed to incorporate them at their next revision.

3. STALL DEMONSTRATIONS. Beginning immediately, the following factors will be emphasized in the demonstrations of stalls on pilot flight tests in small airplanes. THEIR OBSERVANCE IS RECOMMENDED FOR ALL PILOT FLIGHT TRAINING, ESPECIALLY IN HIGH-PERFORMANCE AIRPLANES.

a. Power Stalls will be entered with approximately 65 percent power, instead of maximum authorized climb power as has been the practice in older airplanes. The lower power loading of modern airplanes makes inadvertent attempts to fly at pitch angles which would result in a stall at full throttle most unlikely. The use of approximately 65 percent power in modern airplanes approximates the performance characteristic of the use of full power in small airplanes of the forties.

b. Takeoff and Departure Stalls will be entered at liftoff speed, with the gear extended and flaps in takeoff configuration. In spite of Flight Test Guide instructions to the contrary, many flight test applicants continue to attempt these stalls from

cruising speed in clean configuration. The objective is to simulate the flight situation which exists immediately after takeoff.

Single-Engine Stalls will not be demonstrated on multiengine flight tests. Such stalls have never been required by the Regulations for pilot flight tests, and should not be practiced in high-performance airplanes by other than qualified engineering test pilots.

Engine-Out Minimum Control Speed demonstrations should be conducted in strict accordance with the warning on page 19 of the Multiengine Flight Test Guide. No such demonstration should be attempted when the density altitude and temperature are such that the engine-out minimum control speed is known or discovered to be close to the stalling speed. Loss of directional or lateral control just as a stall occurs is hazardous. Such loss of control when the airspeed is five knots or more above stalling, however, need not be serious.

Stall Recoveries from all types of stalls will be initiated as soon as evidence of a stall is detected. Such evidence may be uncontrollable pitching, buffeting, rapid decay of control effectiveness, or a rapid descent in climb attitude with the elevator control in the full aft position.

The Recovery Altitude used for stall demonstrations on flight tests will be sufficient to recover from an inadvertent spin in the airplane concerned, but in no case lower than 1,500 feet above the surface. This is especially important in clean, high-speed airplanes.

Stall Warning Devices will not be deactivated for flight tests in airplanes for which they are required equipment, as indicated in the Flight Test Guides.

R. P. Hoff

Director
Flight Standards Service

222. [Proposed by Chris-Craft] The aforesaid letter made no reference to the NASA report described in Finding 218.

223. [Proposed by Chris-Craft] Piper's 1968 Annual Report contained a photograph of a Twin Comanche on its cover and (at page 7) stated:

"Sales in Units

	1968	1967	1966
Super Cub	138	138	141
Pawnee	363	337	442
Cherokee Six	269	517	655
Cherokee	2,115	2,455	1,996
Cherokee Arrow	844	65	-
Comanche	93	138	260
Twin Comanche	166	303	375
Aztec/Apache	277	280	415
Navajo	209	69	-
Total Piper Sales	4,474	4,302	4,284
Estimated Industry Sales*	14,000	13,000	14,667
Piper's Percentage	32%	33%	29%

* Including only airplanes with a standard price under $200,000."

Page 9 of the 1968 Annual Report stated that "During fiscal 1968, revised versions of the Aztec and Twin Comanche were developed in Lock Haven * * *".

On the inside of the cover the following inscription appears:

> "Cruising up the coast, Piper's Twin Comanche C makes its debut. New Turbo-charged counterpart has 1,700 mile range, cruises up to 240 mph. Both models can seat six."

No other statements are contained in the 1968 Annual Report with respect to the Twin Comanche.

224A. [Proposed by Piper] The NASA report described in Finding 218, the Design Induced Pilot Error study and Key described in Finding 220, the NTSB briefs of accidents described in Finding 231 were all Government records available to the public at or soon after publication.

224B. [Proposed by Piper] Beginning in 1968 Piper had considered building and selling an aircraft to be known as the PA-39 which would be an improved PA-30 with counter rotating propellers. Prior to the Piper Board meeting of April 24, 1970, referred to in Finding 235, no definite program or plan was implemented by Piper with respect to any improvements to the PA-30's which had been sold since 1963.

225. [Proposed by Chris-Craft] The first page of a Piper document entitled "Brief of PA-30 Fatal Accidents" prepared on or about May 13, 1969 is attached:

707 A

BRIEF OF PA-30 FATAL ACCIDENTS

Number of fatal accidents - 62

Approximate number of people killed - 134

Probable Primary Causes

Pilot error	20
Weather	9
Mid-air collision	2
Missing aircraft	2
Training	10
Out of loading envelope	4
Engine failure	5
Indefinite	5
No information yet	5
	62

	100	200	300	400	500	600	700	800	900	1000	1100	1200
total	7	4	5	6	3	5	4	5	4	3	3	3
SS	3	2	2	3	1	2	3	2	2	1	2	1

16 Still S.S.

1300	1400	1500	1600	1700	1800	1900	Total
2	2	0	3	0	2	1	62
1	1		1		2		29

PLAINTIFF'S EX: 81
DEFENDANT'S EX:
DATE: 4/16/70 PHILIP FELDMAN
SHORTHAND REPORTER

225A. [Proposed by Piper] The balance of the document described in Finding 225 entitled "Summary of PA-30 Accidents" is attached:

S/N of A/C

30-N Pilot error - pilot allowed A/S to get too slow, stalled and spun. L. turn too sharp - Slip engine rpm & L. wing dumped sharply.

30-10 Indefinite - could be pilot incapacitated, over-gross, improper fuel selection. (31 back to.) Engines quit, airspeed deteriorated, stalled, spun. Fuel selector in inbetween position so no fuel could flow. {No in FAA DTA

30-67 Pilot error - fuel starvation of L. engine due to inadequate preparation and lack of pilot proficiency to fly weather which existed.

30-68 UNDETERMINED — AIRCRAFT AND PILOT NEVER FOUND — ASSUMED ~~No info in our files.~~ LEFT TURN - HEADED INTO SNOW SHOWER OVER LAKE HIGH SPEED AT LOW ALT. (0 FT) DESCENDED & CRASHED INTO LAKE

30-71 Grossly overloaded and loaded too far aft - ferry trip.

30-23 ~~30-25~~ Pilot error - got into turbulent clouds, was inexperienced and incapable of flying by instruments, lost control, tore wings off.

SUMMARY OF PA-30 ACCIDENTS

710 A

S/N of A/C	
30-94	No info - NON INST PILOT - ATTEMPTED VFR IN ADVERSE WEATHER - FLEW BELOW OBSTRUCTING TERRAIN - POOR JUDGMENT OF PILOT IN INITIATING FLIGHT UNDER EXISTING WEATHER CONDITIONS
30-112	Loaded for outside envelope (overloaded and c.g. too far aft) - ferry flight, night.
30-118	Pilot dies at time of impact - Indefinite - could have been a heart attack, loss of engine, or vertigo.
30-163	Indefinite - weather, attention diverted while working with fuel valves, lost control, spun.
30-199	Pilot error - pilot practicing SE stalls, etc. alone for twin rating, lost control, spiraled into ocean - poor instruction. STALL SPIN TO RIGHT.
30-226	Instruction - both pilots experienced - accidental spin - lost one prop after spin started, possible engine trouble.
30-234	Weather NON INST PILOT ATTEMPTED CONT. VFR IN ADVERSE WEATHER RESULTING LOSS OF CONTROL - POOR JUDGMENT OF PILOT IN INITIATING FLIGHT UNDER EXISTING CONDITIONS

SUMMARY OF PA-30 ACCIDENTS

711A

S/N of A/C	
30-252	Pilot error - flew into severe thunderstorm area - not instrument rated.
30-253	Pilot error - made very poor landing, damaged aircraft, pilot shaken, engine quit on next takeoff, very poor technique, slowed, stalled, spun.
30-297	Weather - non instrument pilot who may have been drinking continued into IFR weather and lost control.
30-302	Weather - pilot flew into a thunderstorm, lost control, tore off wings.
30-327	Pilot error - night instrument practice by pilots unfamiliar with terrain - flew into mountain.
30-332	Instruction - very inexperienced instructor cut fuel on engine for SE practice, student lost control, stalled and spun.

SUMMARY OF PA-30 ACCIDENTS

S/N of A/C

30-385 Pilot error - solo practice of SE procedure, had engine feathered, couldn't handle, stalled and spun.

30-391 Weather - CAB states pilot attempted VFR in IFR Wx.

30-394 Training flight - SE practice at low altitude, lost control, spun.

30-409 Weather - pilot attempted VFR in IFR conditions, lost control while trying to avoid an obstruction.

30-425 Engine failure - pilot couldn't handle, used poor judgment.

30-426 Weather - non-instrument pilot entered cloud in climbing turn and lost control.

30-503 Instruction flt. - instructor not qualified (2.8 hrs. in PA-30), SE practice at low alt., neither pilot could handle, stall and spun.

S/N of A/C

30-521 Indefinite - could be weather, lack of oxygen, physical impairment, or autopilot trouble.

30-537 Pilot error - improper IFR operation.

30-587 Pilot error - ran out of fuel, stretched glide, stalled, rolled into ground.

30-591 Pilot error - failed to use proper procedures, incorrect fuel management, autopilot on during takeoff.

30-619 Mid-aid collision.

30-627 Engine failure on takeoff, overweight, poor SE technique, stalled and spun. May have had prop trouble.

30-672 Engine trouble, tried forced landing rather than SE operation misjudged.

SUMMARY OF PA-30 ACCIDENTS

S/N or A/C	
30-673	Pilot error - took off on "aux." tank, lost engine at 4-500; lost control, spun.
30-715	Indefinite - pilot probably flew into severe thunderstorm.
30-722	Pilot error - while paying attention to traffic difficulties pilot allowed airspeed to get too slow, stalled and spun.
30-737	Unknown - aircraft missing.
30-754	Weather - non-instrument rated pilot flying night VFR in poor visibility.
30-782	Training - probably practicing SE operation at low altitude, spun.
30-815	Pilot error - pilot tried to climb too steeply thru a saddle in a mountain, saw he couldn't make it, turned at low speed, spun.

ONLY COPY AVAILABLE

SUMMARY OF PA-30 ACCIDENTS

S/N of A/C	
30-855	No info yet - happened 2/15/69.
30-857	Left engine failure after takeoff - operating right engine was malfunctioning, before and during flight, pilot did not maintain airspeed, stalled at low altitude.
30-880	Weather - vertigo, loss of control.
30-956	No info - 2/27/69. No Record
30-978	Out of loading envelope - pilot error.
30-995	Pilot error - took off on aux. tank, eng. failed, overloaded improper SE technique, very late at night.
30-1023	Pilot error - poor instruction, practicing power on stalls at 1000 ft. when IP cut one engine.

S/N of A/C	
30-1079	Pilot error - attempted to fly in Wx, no instrument rating, pilot also had a physical problem.
30-1093	Training - possibly engine or prop trouble on one engine due to poor maintenance.
30-1101	Pilot error - pilot took off from wet soft field, forced lift off, did not gain sufficient air-speed before climbing turn was begun.
30-1109	No info 6/17/69.
30-1164	Missing aircraft - reason unknown.
30-1227	Engine failure on takeoff.
30-1235	Pilot error - under influence of alcohol, flying IFR descended below minimums and struck ground.
30-1313	Training in marginal weather - stalled and spun.

SUMMARY OF PA-30 ACCIDENTS

S/N of A/C	
30-1357	Mid-air collision.
30-1508	Weather - entered severe thunderstorm.
30-1544	Training - stalled and spun while doing SE practice?
30-1561	Training - could have been a fuel management problem.
30-1721	Pilot error - pilot allowed airspeed to get too low, attempted steep turn onto final, spun.
30-1749	Training - aircraft had been in accident previously, stalled at low altitude.
30-1815	Out of loading envelope, night, inexperienced pilot, not much info 5/13/69.

226B. [Proposed by Piper].

In November 1969, Messrs. Gordon, Rochlis and Barnett retained William I. Stieglitz Associates, a consulting firm specializing in aircraft matters, to advise them with respect to PA-30 matters. In April 1970, Mr. Stieglitz submitted a written report entitled "PA-30 Investigation - Evaluation of Safety of Piper PA-30 in Stall Regime" to Messrs. Gordon, Barnett and Rochlis. No public statements were made by Chris-Craft or Messrs. Gordon, Barnett or Rochlis concerning the PA-30 or any of the matters discussed in the Stieglitz report. Chris-Craft submitted or made available a copy of the Stieglitz report to the FAA and the NTSB on May 27, 1970, and no action has been announced by the FAA or NTSB with respect thereto.

232A. [Proposed by Piper] The NTSB classified each of the accidents described in Finding 232 by type of accident and probable cause as follows:

(Portions of NTSB records attached)

DOCKET	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT	PILOT DATA

2-0142 1/15/64 WHITEHAVEN TENN — PIPER PA30 N-7037Y DAMAGE -DESTROYED — CR- 1 0 0 PX- 2 0 0 — NONCOMMERCIAL BUSINESS — PRIVATE, AGE 33, 662 TOTAL HOURS, 101 IN TYPE.
TIME - 0700

PHASE OF OPERATION
INFLIGHT CLIMB TO CRUISE
INFLIGHT CLIMB TO CRUISE

TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL

PROBABLE CAUSE
MISCELLANEOUS ACTS,CONDITIONS - FUEL STARVATION
MISCELLANEOUS-PERSONNEL - PASSENGER
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
EMERGENCY CIRCUMSTANCES - FORCED LANDING OFF AIRPORT ON LAND

REMARKS- PASSENGER INADVERTENTLY TURNED FUEL SELLCTOR

720A

2-0773 4/13/64 NR.SEBASTIAN FLA — PIPER PA-30 N-7336Y DAMAGE -DESTROYED — CR- 1 0 0 PX- 0 0 0 — NONCOMMERCIAL PRACTICE — PRIVATE, AGE 56, 400 TOTAL HOURS, 45 IN TYPE.
TIME - 1555

PHASE OF OPERATION
TAKEOFF INITIAL CLIMB
INFLIGHT OTHER

TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL SPIN

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
PILOT IN COMMAND - MISMANAGEMENT OF FUEL SYSTEM
FACTOR
MISCELLANEOUS ACTS,CONDITIONS - SIMULATED CONDITIONS
FIRE AFTER IMPACT
REMARKS- PILOT PRACTICING FOR MULTI-ENGINE PILOT RATING-PILOT FORGOT TO TURN FUEL ON TO RESTART INOP ENGINE

DOCKET	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
3-1165	5/4/64	SAN JUAN PR TIME - 1600	PIPER PA30 N-7322Y DAMAGE -DESTROYED	CR- 0 0 2 PX- 0 0 0	NONCOMMERCIAL BUSINESS	AGE 42, 3600 TOTAL HOURS, 25 IN TYPE.

TYPE OF ACCIDENT
STALL

PHASE OF OPERATION
TAKEOFF INITIAL CLIMB

PROBABLE CAUSE
PILOT IN COMMAND - PREMATURE LIFT-OFF

DOCKET	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
2-0907	6/7/64	TROY MICH TIME - 0850	PIPER PA-30 N-7202Y DAMAGE -DESTROYED	CR- 2 0 0 PX- 1 0 0	INSTRUCTIONAL CHECK	COMMERCIAL,FL.INSTR., AGE 46, 13122 TOTAL HOURS, UNKNOWN IN TYPE.

TYPE OF ACCIDENT
STALL SPIN

PHASE OF OPERATION
INFLIGHT NORMAL CRUISE

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
MISC-REASON RECOVERY FROM SPIN NOT MADE UNKNOWN
FACTOR
MISCELLANEOUS ACTS,CONDITIONS - SIMULATED CONDITIONS
MISCELLANEOUS ACTS,CONDITIONS - SEPARATION IN FLIGHT
REMARKS- AIRCRAFT CRASHED IN FLAT SPIN

DOCKET	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
2-0807	8/3/64	LOTHIAN MARYLAND TIME - 0610	PIPER PA-30 N-7341Y DAMAGE -DESTROYED	CR- 1 0 0 PX- 0 0 0	NONCOMMERCIAL BUSINESS	COMMERCIAL,FL.INSTR., AGE 35, 1503 TOTAL HOURS, 40 IN TYPE.

TYPE OF ACCIDENT
COLLISION WITH GROUND/WATER UNCONTROLLED

PHASE OF OPERATION
INFLIGHT UNCONTROLLED DESCENT

PROBABLE CAUSE
PILOT IN COMMAND - CONTINUED VFR FLIGHT INTO ADVERSE WEATHER CONDITIONS
FACTOR
WEATHER - LOW CEILING
WEATHER - FOG
WEATHER BRIEFING - PARTIAL BRIEFING BY FSP, BY PHONE
WEATHER FORECAST - WEATHER SLIGHTLY WORSE THAN FORECAST

DOCKET	DATE	LOCATION	AIRCRAFT DATA	INJURIES F	S	N/N	PURPOSE

2-0900 10/20/64 NR.EUREKA CALIFORNIA PIPER PA-30 CR- 1 0 0 INSTRUCTIONAL PRIVATE, AGE 52, 1505 TOTAL
TIME - 0915 N-7179Y PX- 0 0 0 SOLO HOURS, 44 IN TYPE.
DAMAGE -DESTROYED

TYPE OF ACCIDENT
STALL SPIN

PHASE OF OPERATION
INFLIGHT NORMAL CRUISE

PROBABLE CAUSE
MISCELLANEOUS - UNDETERMINED
REMARKS- ACFT CRASHED IN PACIFIC OCEAN.ITEMS OF IDENTIFIABLE WRECKAGE RCVRD.PILOT PRESUMED DEAD.

722 A

DOCKET	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
2-0639	7/19/55	ORANGE CALIF TIME - 1239	PIPER PA-30 N-7344Y DAMAGE -DESTROYED	CR- 2 0 0 PX- 0 0 0	INSTRUCTIONAL DUAL	COMMERCIAL,FL.INSTR., AGE 30, 4183 TOTAL HOURS, 102 IN TYPE.

TYPE OF ACCIDENT
STALL SPIN

PHASE OF OPERATION
INFLIGHT OTHER

PROBABLE CAUSE
MISCELLANEOUS - UNDETERMINED

DOCKET	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
2-0677	8/26/55	ANAHUAC,TEX. TIME - 1550	PIPER PA-30 N-7698Y DAMAGE -DESTROYED	CR- 2 0 0 PX- 2 0 0	INSTRUCTIONAL DUAL	ATR,FLIGHT INSTR., AGE 31, 5466 TOTAL HOURS, 15 IN TYPE.

TYPE OF ACCIDENT
STALL SPIN

PHASE OF OPERATION
INFLIGHT CLIMB TO CRUISE

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
REMARKS- AIRCRAFT CRASHED IN A SWAMP.

DOCKET	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
2-0649	8/27/55	LO-AKE TEX TIME - 1430	PIPER PA-30 N-7229Y DAMAGE -DESTROYED	CR- 1 0 0 PX- 1 2 0	NONCOMMERCIAL BUSINESS	PRIVATE, AGE 39, 321 TOTAL HOURS, 86 IN TYPE.

TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL SPIN

PHASE OF OPERATION
TAKEOFF INITIAL CLIMB
TAKEOFF INITIAL CLIMB

PROBABLE CAUSE
POWERPLANT - MISCELLANEOUS - POWERPLANT FAILURE FOR UNDETERMINED REASONS
MISCELLANEOUS ACTS,CONDITIONS - IMPROPER EMERGENCY PROCEDURES
FACTOR
PILOT IN COMMAND - LACK OF FAMILIARITY WITH AIRCRAFT

DOCKET	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
2-0501	1/2/66 TIME - 0922	FT LAUDERDALE FLA	PIPER PA-30 N-7564Y DAMAGE -SUBSTANTIAL	CR- 1 0 0 PX- 2 0 0	NONCOMMERCIAL PLEASURE	PRIVATE, AGE 21, 259 TOTAL HOURS, 67 IN TYPE.

TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL SPIN

PHASE OF OPERATION
TAKEOFF INITIAL CLIMB
LANDING TRAFFIC PATTERN-CIRCLING

PROBABLE CAUSE
PWR PLT-UNMANIED FEATHER NO 1 PROP UNDET REASON.
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
MISCELLANEOUS ACTS,CONDITIONS - IMPROPER EMERGENCY PROCEDURES
FACTOR
MISCELLANEOUS ACTS,CONDITIONS -, IMPROPERLY LOADED AIRCRAFT-WEIGHT-AND/OR C.G.
REMARKS- LDG GEAR,FLAPS NOT RETRACTED DURING EMERGENCY.

DOCKET	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
3-0021	1/6/66 TIME - 2045	FRANKLIN IND	PIPER PA-30 N-7073Y DAMAGE -SUBSTANTIAL	CR- 0 0 1 PX- 0 0 0	NONCOMMERCIAL BUSINESS	COMMERCIAL,FL.INSTR., AGE 42, 19576 TOTAL HOURS, 400 IN TYPE.

TYPE OF ACCIDENT
STALL MUSH

PHASE OF OPERATION
LANDING FINAL APPROACH

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
REMARKS- NIGHT OPERATION

DOCKET	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
2-0154	1/14/66 TIME - 1408	LYNCHBURG VA	PIPER PA-30 N-7522Y DAMAGE -DESTROYED	CR- 1 0 0 PX- 1 1 0	NONCOMMERCIAL PLEASURE	PRIVATE, AGE 69, 520 TOTAL HOURS, 78 IN TYPE.

TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL SPIN

PHASE OF OPERATION
LANDING FINAL APPROACH
LANDING FINAL APPROACH

PROBABLE CAUSE
MISCELLANEOUS ACTS,CONDITIONS - FUEL EXHAUSTION
PILOT IN COMMAND - INADEQUATE PREFLIGHT PREPARATION AND/OR PLANNING
PILOT IN COMMAND - BECAME LOST/DISORIENTED
FACTOR
MISCELLANEOUS ACTS,CONDITIONS - FAILURE OF TWO OR MORE ENGINES
EMERGENCY CIRCUMSTANCES - FORCED LANDING OFF AIRPORT ON LAND

724A

		AIRCRAFT DATA	INJURIES F S N/N	FLIGHT PURPOSE	PILOT DATA

3-3491 4/14/65 -ILLSBORO BEC
TIME - 1900

PIPER PA-30
N-2465Y
DAMAGE -DESTROYED

CR- 0 0 1
PX- 0 0 0

NONCOMMERCIAL
PLEASURE

PRIVATE, AGE 45, 375 TOTAL HOURS, 345 IN TYPE.

TYPE OF ACCIDENT
STALL -TURN

PHASE OF OPERATION
TAKEOFF INITIAL CLIMB

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
FACTOR
PILOT IN COMMAND - INADEQUATE PREFLIGHT PREPARATION AND/OR PLANNING
REMARKS- TAKEOFF MADE WITH ELVATOR TRIM TAB POSITIONED TO THE NOSE HIGH POSITION

2-0831 10/1/65 PORT ORANGE FLA
TIME - 1406

PIPER PA-30
N-7333Y
DAMAGE -DESTROYED

CR- 2 0 0
PX- 0 0 0

INSTRUCTIONAL
DUAL

COMMERCIAL,FL.INSTR., AGE 24, 1973 TOTAL HOURS, 3 IN TYPE.

TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL SPIN

PHASE OF OPERATION
INFLIGHT NORMAL CRUISE
INFLIGHT NORMAL CRUISE

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
FACTOR
MISCELLANEOUS ACTS,CONDITIONS - SIMULATED CONDITIONS
REMARKS- RT ENGINE SHUT DOWN TO SIMULATE SINGLE ENGINE FLIGHT

725A

DOCKET	DATE	LOCATION	AIRCRAFT DAM	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
2-0045	2/10/66 TIME - 1810	SAN FRANCISCO CAL	PIPER PA-30 N-7851Y DAMAGE -DESTROYED	CR- 0 1 0 PX- 1 0 0	MISCELLANEOUS FERR	COMMERCIAL, AGE 19, 1800 TOTAL HOURS, 25 IN TYPE.

TYPE OF ACCIDENT
STALL SPIN

PHASE OF OPERATION
TAKEOFF INITIAL CLIMB

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
PILOT IN COMMAND - INADEQUATE PREFLIGHT PREPARATION AND/OR PLANNING
FACTOR
MISCELLANEOUS ACTS,CONDITIONS - IMPROPERLY LOADED AIRCRAFT-WEIGHT-AND/OR C.G.
PILOT IN COMMAND - IMPROPER OPERATION OF POWERPLANT + POWERPLANT CONTROLS

DOCKET	DATE	LOCATION	AIRCRAFT DAM	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
2-0473	6/2/66 TIME - 1510	NR.RED BLUFF CALIF	PIPER PA-30 N-7440Y DAMAGE -DESTROYED	CR- 2 0 0 PX- 1 0 0	INSTRUCTIONAL DUAL	COMMERCIAL,FL.INSTR., AGE 23, 527 TOTAL HOURS, 3 IN TYPE.

TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL SPIN

PHASE OF OPERATION
INFLIGHT NORMAL CRUISE
INFLIGHT NORMAL CRUISE

PROBABLE CAUSE
MISCELLANEOUS ACTS,CONDITIONS - SIMULATED CONDITIONS
PILOT IN COMMAND - IMPROPER OPERATION OF FLIGHT CONTROLS
REMARKS- WITNESSES SAW N7440Y APPROACH A STALL WITH NO.2 PROP FEATHERED,ENTER A FLAT SPIN,AND CRASH.

DOCKET	DATE	LOCATION	AIRCRAFT DAM	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
2-0743	8/21/66 TIME - 0525	NR.INDEPENDENCE CAL	PIPER PA-30 N-7726Y DAMAGE -DESTROYED	CR- 1 0 0 PX- 3 0 0	NONCOMMERCIAL PLEASURE	COMMERCIAL,FL.INSTR., AGE 45, 3653 TOTAL HOURS, 396 IN TYPE.

TYPE OF ACCIDENT
STALL SPIN

PHASE OF OPERATION
INFLIGHT NORMAL CRUISE

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
MISCELLANEOUS ACTS,CONDITIONS - FLEW INTO BLIND CANYON
FACTOR
TERRAIN - HIGH OBSTRUCTIONS
REMARKS- UPSLOPE OF CANYON WALLS APPROXIMATELY 47-DEGS. AT IMPACT POINT.

DOCKET	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
3-2648	9/27/66 TIME - 1339	FOUNTAIN COLO	PIPER PA-30 N-7903Y DAMAGE -SUBSTANTIAL	CR- 0 0 2 PX- 0 0 0	INSTRUCTIONAL DUAL	COMMERCIAL,FL.INSTR.,AGE 37, 2259 TOTAL HOURS, 107 IN TYPE.

TYPE OF ACCIDENT
STALL: SPIN

PHASE OF OPERATION
LANDING GO-AROUND

PROBABLE CAUSE
PUPIL STUDENT - PREMATURE LIFT-OFF
PILOT IN COMMAND - INADEQUATE SUPERVISION OF FLIGHT
FACTOR
MISCELLANEOUS ACTS,CONDITIONS - SIMULATED CONDITIONS
MISCELLANEOUS ACTS,CONDITIONS - INSTRUCTIONS-MISINTERPRETED
REMARKS- SIMULATED ENGINE FAILURE.

2-0119	2/4/67 TIME - 1330	DOTHAN,ALA	PIPER PA-30 N8195Y DAMAGE-DESTROYED	CR- 2 0 0 PX- 1 0 0	INSTRUCTIONAL DUAL	COMMERCIAL, FL.INSTR., AGE 40, 6999 TOTAL HOURS, 45 IN TYPE, INSTRUMENT RATED.

NAME OF AIRPORT - WHELLESS
TYPE OF ACCIDENT
STALL: SPIN

PHASE OF OPERATION
IN FLIGHT: NORMAL CRUISE

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
REMARKS- AIRCRAFT STRUCK GROUND IN FLAT SPIN DURING MULTI ENGINE INSTRUCTIONAL FLIGHT.

727A

2-0560	4/23/67 TIME - 1240	CHARLES CITY,IOWA	PIPER PA-30 N7764Y DAMAGE-DESTROYED	CR- 1 0 0 PX- 0 1 0	NONCOMMERCIAL CORP/EXEC	COMMERCIAL, FL.INSTR., AGE 38, 3720 TOTAL HOURS, 1500 IN TYPE, INSTRUMENT RATED.

NAME OF AIRPORT - CHARLES CITY MUNI
TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL: SPIN

PHASE OF OPERATION
IN FLIGHT: CLIMB TO CRUISE
LANDING: FINAL APPROACH

PROBABLE CAUSE
POWERPLANT - MISCELLANEOUS: POWERPLANT FAILURE FOR UNDETERMINED REASONS
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
MISCELLANEOUS ACTS,CONDITIONS - IMPROPER EMERGENCY PROCEDURES
COMPLETE POWER LOSS - COMPLETE ENGINE FAILURE/FLAMEOUT-1 ENGINE
EMERGENCY CIRCUMSTANCES - PRECAUTIONARY LANDING ON AIRPORT
REMARKS- FUEL SELECTORS ON L.AUX,R.MAIN TANKS.TEARDOWN LEFT ENG SHOWED NO CAUSE FOR FAILURE.PROP NOT FETHRD

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
2-0819	7/20/67 TIME - 0745	WINDSOR,COLO	PIPER PA-30 N8389Y DAMAGE-DESTROYED	CR- 2 0 0 PX- 0 0 0	INSTRUCTIONAL DUAL	COMMERCIAL, FL.INSTR., AGE 48, 5973 TOTAL HOURS, 300 IN TYPE, INSTRUMENT RATED.

TYPE OF ACCIDENT
STALL: SPIN

PHASE OF OPERATION
UNKNOWN/NOT REPORTED

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED

2-0869	7/30/67 TIME - 1850	MASONVILLE,NJ	PIPER PA-30 N7932Y DAMAGE-DESTROYED	CR- 2 0 0 PX- 0 2 0	INSTRUCTIONAL DUAL	COMMERCIAL, FL.INSTR., AGE 32, 2900 TOTAL HOURS, 163 IN TYPE, INSTRUMENT RATED.

NAME OF AIRPORT - MOORESTOWN
TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL: SPIN

PHASE OF OPERATION
IN FLIGHT: NORMAL CRUISE
IN FLIGHT: NORMAL CRUISE

PROBABLE CAUSE
PILOT IN COMMAND - IMPROPER IN-FLIGHT DECISIONS OR PLANNING
MISCELLANEOUS ACTS,CONDITIONS - SIMULATED CONDITIONS
PILOT IN COMMAND - INADEQUATE SUPERVISION OF FLIGHT
PILOT IN COMMAND - MISJUDGED ALTITUDE
DUAL STUDENT - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
REMARKS- PRACTISING SINGLE ENG STALLS,FULL FLAPS,GEAR DOWN AT LOW ALTITUDE. SPIN RECOVERY MADE TOO LATE.

728A

3-2822	8/8/67 TIME - 1730	W.PALM BEACH,FLA	PIPER PA-30 N8051Y DAMAGE-SUBSTANTIAL	CR- 0 0 2 PX- 0 0 0	INSTRUCTIONAL DUAL	COMMERCIAL, FL.INSTR., AGE 32, 1400 TOTAL HOURS, 30 IN TYPE, INSTRUMENT RATED.

NAME OF AIRPORT - PALM BEACH INTL
TYPE OF ACCIDENT
STALL

PHASE OF OPERATION
LANDING: GO-AROUND

PROBABLE CAUSE
DUAL STUDENT - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
PILOT IN COMMAND - INADEQUATE SUPERVISION OF FLIGHT
REMARKS-NO.2 ENG AT ZERO THRUST FOR SIMULATED SINGLE ENG APP.POWER APPLIED TO BOTH ENGS ON GO AROUND.

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES	FLIGHT	PILOT DATA

F S M/N PURPOSE PILOT DATA

→ 2-0928 9/6/67 CRAWFORDSVLE,IND PIPER PA-30 CR- 2 0 0 INSTRUCTIONAL COMMERCIAL, FL.INSTR., AGE 42, 1471 TOTAL HOURS, 43 IN TYPE, INSTRUMENT RATED.
TIME - 0915 N8411Y PX- 0 0 0 DUAL
DAMAGE-DESTROYED

TYPE OF ACCIDENT
STALL: SPIN

PHASE OF OPERATION
IN FLIGHT: NORMAL CRUISE

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
FIRE AFTER IMPACT
REMARKS- STUDENT TRAINING FOR MULTI-ENG RATING,NO PRIOR MULTI-ENG EXPERIENCE.

729A

→ 2-0788 10/17/67 WATERLOO,IOWA PIPER PA-30 CR- 0 2 0 INSTRUCTIONAL COMMERCIAL, FL.INSTR., AGE 30, 804 TOTAL HOURS, 24 IN TYPE, NOT INSTRUMENT RATED.
TIME - 0720 N8306Y PX- 0 0 0 DUAL
DAMAGE-DESTROYED

NAME OF AIRPORT - WATERLOO MUNI.
TYPE OF ACCIDENT
HARD LANDING
STALL

PHASE OF OPERATION:
LANDING: LEVEL OFF/TOUCHDOWN
LANDING: GO-AROUND

PROBABLE CAUSE
DUAL STUDENT - IMPROPER LEVEL OFF
PILOT IN COMMAND - INADEQUATE SUPERVISION OF FLIGHT
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
PILOT IN COMMAND - IMPROPER OPERATION OF POWERPLANT & POWERPLANT CONTROLS
MISCELLANEOUS ACTS,CONDITIONS - FEATHERED WRONG ENGINE
REMARKS- LEFT PROP STRUCK GROUND ON LANDING, RIGHT PROP FOUND FEATHERED AFTER CRASH.

LL	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
→	3-0725	3/16/68 ALTON,ILL TIME - 1424	PIPER PA-30 N7643Y DAMAGE-DESTROYED	CR- 2 0 0 PX- 0 0 0	INSTRUCTIONAL DUAL	ATR,FLIGHT INSTR., AGE 57, 4584 TOTAL HOURS, 92 IN TYPE, INSTRUMENT RATED.
→	3-3888	4/16/68 SILVER LAKE,OREG TIME - 1230	PIPER PA-30 N7234Y DAMAGE-DESTROYED	CR- 0 0 1 PX- 0 0 2	NONCOMMERCIAL PLEASURE	PRIVATE, AGE 38, 1522 TOTAL HOURS, 170 IN TYPE, NOT INSTRUMENT RATED.
→	3-1752	5/27/68 NEW MARTINSVIL,W VA TIME - 2025	PIPER PA-30 N7996Y DAMAGE-DESTROYED	CR- 1 0 0 PX- 0 0 0	NONCOMMERCIAL BUSINESS	PRIVATE, AGE 45, 3020 TOTAL HOURS, 1246 IN TYPE, NOT INSTRUMENT RATED.

3-0725

NAME OF AIRPORT - CIVIC MEMORIAL
TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL

PHASE OF OPERATION
LANDING: FINAL APPROACH
LANDING: FINAL APPROACH

PROBABLE CAUSE
MISCELLANEOUS ACTS,CONDITIONS - SIMULATED CONDITIONS
DUAL STUDENT - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
PILOT IN COMMAND - INADEQUATE SUPERVISION OF FLIGHT
REMARKS- PRACTISING SINGLE ENG LNDG.

3-3888

NAME OF AIRPORT - FARM STRIP
TYPE OF ACCIDENT
PROPELLER/ROTOR FAILURE: PROPELLER
STALL

PHASE OF OPERATION
IN FLIGHT: NORMAL CRUISE
LANDING: GO-AROUND

PROBABLE CAUSE
POWERPLANT - PROPELLER AND ACCESSORIES: HYDRAULIC PITCH CONTROL MECHANISM
MISCELLANEOUS ACTS,CONDITIONS - PRESSURE TOO LOW
PILOT IN COMMAND - MISJUDGED DISTANCE AND SPEED
FACTOR
MISCELLANEOUS ACTS,CONDITIONS - POORLY PLANNED APPROACH
EMERGENCY CIRCUMSTANCES - FORCED LANDING ON AIRPORT/SEAPLANE BASE/HELIPT.
SUSPECTED MECHANICAL DISCREPANCY
REMARKS- LOW AIR CHARGE OF 6 PSIG IN RT PROP,CAUSE UNDETERMINED. PLT UNABLE TO FEATHER PROP.

3-1752

NAME OF AIRPORT - NEW MARTINSVILLE
TYPE OF ACCIDENT
STALL

PHASE OF OPERATION
TAKEOFF: INITIAL CLIMB

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
REMARKS- PILOT MADE A SHORT FIELD TAKE OFF FROM WET SOD RUNWAY AT NIGHT

730A

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
3-2353	6/1/68 TIME - 1045	ONTARIO,CALIF	PIPER PA-30 N7109Y DAMAGE-DESTROYED	CR- 1 0 0 PX- 2 0 0 OT- 0 ? 0	NONCOMMERCIAL PLEASURE	COMMERCIAL, AGE 64, 776 TOTAL HOURS, 25 IN TYPE, INSTRUMENT RATED.

NAME OF AIRPORT - ONTARIO
TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL

PHASE OF OPERATION
TAKEOFF: INITIAL CLIMB
TAKEOFF: INITIAL CLIMB

PROBABLE CAUSE
POWERPLANT - MISCELLANEOUS POWERPLANT FAILURE FOR UNDETERMINED REASONS
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
PARTIAL POWER LOSS - PARTIAL LOSS OF POWER - 1 ENGINE
EMERGENCY CIRCUMSTANCES - FOR PLANNING ON AIRPORT/SEAPLANE BASE/HELIPT.
REMARKS- POWER INTERRUPTION,AT ENG.HIT AUTO.

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
3-4594	6/17/68 TIME - 1710	STATESBORO,GA	PIPER PA-30 N7603Y DAMAGE-DESTROYED	CR- 2 0 0 PX- 0 0 0	INSTRUCTIONAL DUAL	COMMERCIAL, FL.INSTR., AGE 23, 1650 TOTAL HOURS, 540 IN TYPE, NOT INSTRUMENT RATED.

NAME OF AIRPORT - STATESBORO
TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL: SPIN

PHASE OF OPERATION
TAKEOFF: INITIAL CLIMB
TAKEOFF: INITIAL CLIMB

PROBABLE CAUSE
PILOT IN COMMAND - MISMANAGEMENT OF FUEL
MISCELLANEOUS ACTS,CONDITIONS - FUEL STARVATION
MISCELLANEOUS ACTS,CONDITIONS - FAILURE OF TWO OR MORE ENGINES
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
MISCELLANEOUS ACTS,CONDITIONS - IMPROPER EMERGENCY PROCEDURES
COMPLETE POWER LOSS - COMPLETE ENGINE FAILURE/FLAMEOUT-2 ENGINES
REMARKS- ACFT STRUCK GRND IN A FLAT ATTITUDE.

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
3-2359	7/9/68 TIME - 1620	LOCK HAVEN,PA	PIPER PA-30 N8572Y DAMAGE-DESTROYED	CR- 1 0 0 PX- 0 0 0	NONCOMMERCIAL PLEASURE	PRIVATE, AGE 55, 555 TOTAL HOURS, 330 IN TYPE, INSTRUMENT RATED.

NAME OF AIRPORT - LOCK HAVEN
TYPE OF ACCIDENT
STALL

PHASE OF OPERATION
LANDING: TRAFFIC PATTERN-CIRCLING

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
FACTOR
MISCELLANEOUS ACTS,CONDITIONS - POORLY PLANNED APPROACH
FIRE AFTER IMPACT
REMARKS- IN STEEP BANK,TURNING TO FINAL.

731A

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
3-0343	2/27/69 TIME - 0910	KEY WEST, FLA	PIPER PA-30 N7872Y DAMAGE-DESTROYED	CR- 0 0 2 PX- 0 0 1	NONCOMMERCIAL PRACTICE	COMMERCIAL, AGE 37, 527 TOTAL HOURS, 89 IN TYPE, INSTRUMENT RATED.

NAME OF AIRPORT - KEY WEST INTL
TYPE OF ACCIDENT
STALL
PHASE OF OPERATION
LANDING: FINAL APPROACH

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
PILOT IN COMMAND - IMPROPER OPERATION OF FLIGHT CONTROLS
FACTOR
MISCELLANEOUS ACTS, CONDITIONS - AIRCRAFT CAME TO REST IN WATER
REMARKS- PRACTICE VOR APPCH. STALLED FROM STEEP TURN MANEUVERING TO FINAL.

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
3-1727	5/13/69 TIME - 1840	RIPON, CALIF	PIPER PA-30 N8672Y DAMAGE-DESTROYED	CR- 1 0 0 PX- 5 0 0	NONCOMMERCIAL PLEASURE/PERSONAL TRANSP	PRIVATE, AGE 34, 356 TOTAL HOURS, 89 IN TYPE, NOT INSTRUMENT RATED.

TYPE OF ACCIDENT
STALL: SPIN
PHASE OF OPERATION
UNKNOWN/NOT REPORTED

PROBABLE CAUSE
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
PILOT IN COMMAND - IMPROPER OPERATION OF FLIGHT CONTROLS
FACTOR
PILOT IN COMMAND - INADEQUATE PREFLIGHT PREPARATION AND/OR PLANNING
MISCELLANEOUS ACTS, CONDITIONS - IMPROPERLY LOADED AIRCRAFT-WEIGHT-AND/OR C.G.
REMARKS- ACFT ENTERED FLAT SPIN FROM NORMAL SPIN AT APRX 500 FT AGL. OVERGROSS 187 LBS. EXCEEDED AFT CG LIMIT

732A

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA

3-2062 6/30/69 [illegible],MICH PIPER PA-30 CR- 1 0 0 NONCOMMERCIAL PRIVATE, ALL 30, 1751
TIME - 0130 N7960Y PX- 2 0 0 PLEASURE/PERSONAL TRANSP TOTAL HOURS, 251 IN TYPE,
DAMAGE-DESTROYED NOT INSTRUMENT RATED.

NAME OF AIRPORT - METRO
DEPARTURE POINT
INKSTER,MICH
TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL: SPIN

INTENDED DESTINATION
CHICAGO,ILL

LAST ENROUTE STOP
UNKNOWN/NOT REPORTED
PHASE OF OPERATION
TAKEOFF: INITIAL CLIMB
TAKEOFF: INITIAL CLIMB

PROBABLE CAUSE
POWER PLANT - FUEL SYSTEM: SELECTOR/VALVES
MISCELLANEOUS ACTS,CONDITIONS - LOOSE,PART/FITTING
MISCELLANEOUS ACTS,CONDITIONS - IMPROPERLY INSTALLED
PERSONNEL - MAINTENANCE,SERVICING,INSPECTION: INADEQUATE MAINTENANCE AND INSPECTION
MISCELLANEOUS ACTS,CONDITIONS - FUEL STARVATION
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
FACTOR
MISCELLANEOUS ACTS,CONDITIONS - IMPROPERLY LOADED AIRCRAFT-WEIGHT-AND/OR C.G.
COMPLETE POWER LOSS - COMPLETE ENGINE FAILURE/FLAMEOUT-1 ENGINE
EMERGENCY CIRCUMSTANCES - FORCED LANDING OFF AIRPORT ON LAND
REMARKS- LOOSE POINTER/HANDLE ON L FUEL SELECTOR VALVE ALLOWED PLT TO POSITION VALVE TO OFF.114 LB OVR-GRSS

3-2062 6/30/69 FRANCOCAS,NJ PIPER PA-30 CR- 2 0 0 INSTRUCTIONAL COMMERCIAL, FL.INSTR.,
TIME - 1002 N8809Y PX- 0 0 0 DUAL AGE 30, 874 TOTAL HOURS,
DAMAGE-DESTROYED 50 IN TYPE, INSTRUMENT
RATED.

NAME OF AIRPORT - INDEL
TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL: SPIN

PHASE OF OPERATION
LANDING: GO-AROUND
LANDING: GO-AROUND

PROBABLE CAUSE
MISCELLANEOUS ACTS,CONDITIONS - SIMULATED CONDITIONS
DUAL STUDENT - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
PILOT IN COMMAND - INADEQUATE SUPERVISION OF FLIGHT
REMARKS- SIMULATED SINGLE-ENG FLT.

733A

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S N/A	FLIGHT PURPOSE	PILOT DATA
3-3430	8/5/67 TIME - 0951	WINDSR LOCKS,CONN	PIPER PA-30 N4482 DAMAGE-SUBSTANTIAL	CR- 0 0 1 PX- 0 0 0	NONCOMMERCIAL BUSINESS	PRIVATE, AGE 51, 1990 TOTAL HOURS, 430 IN TYPE, INSTRUMENT RATED.

NAME OF AIRPORT - BRADLEY INT
DEPARTURE POINT
WINDSR LOCKS,CONN
INTENDED DESTINATION
CLEVELAND,OHIO
TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL
PHASE OF OPERATION
TAKEOFF: INITIAL CLIMB
TAKEOFF: INITIAL CLIMB

PROBABLE CAUSE
PILOT IN COMMAND - INADEQUATE PREFLIGHT PREPARATION AND/OR PLANNING
POWERPLANT - FUEL SYSTEM: FUEL INJECTION SYSTEM
MISCELLANEOUS ACTS,CONDITIONS - WATER IN FUEL
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
MISCELLANEOUS ACTS,CONDITIONS - IMPROPER EMERGENCY PROCEDURES
COMPLETE POWER LOSS - COMPLETE ENGINE FAILURE/FLAMEOUT-1 ENGINE
REMARKS- WATER FOUND IN L FUEL LINE,INJECTOR,AND SCREEN PORT. POOR SEAL AT FUEL TANK FILLER NECK GASKETS.

3-3147	10/17/69 TIME - 1315	GREELEY,COLO	PIPER PA-30 N6004Y DAMAGE-DESTROYED	CR- 2 0 0 PX- 0 0 0	NONCOMMERCIAL PLEASURE/PERSONAL TRANSP	PRIVATE, AGE 60, 5162 TOTAL HOURS, 11C IN TYPE, INSTRUMENT RATED.

DEPARTURE POINT
LARAMIE,WYO
INTENDED DESTINATION
ALBUQUERQUE,N MEX
TYPE OF ACCIDENT
ENGINE FAILURE OR MALFUNCTION
STALL: SPIN
PHASE OF OPERATION
IN FLIGHT: NORMAL CRUISE
IN FLIGHT: OTHER

PROBABLE CAUSE
PILOT IN COMMAND - INADEQUATE PREFLIGHT PREPARATION AND/OR PLANNING
MISCELLANEOUS ACTS,CONDITIONS - WATER IN FUEL
PILOT IN COMMAND - FAILED TO OBTAIN/MAINTAIN FLYING SPEED
FACTOR
MISCELLANEOUS ACTS,CONDITIONS - IMPROPERLY LOADED AIRCRAFT-WEIGHT-AND/OR C.G.
PARTIAL POWER LOSS - PARTIAL LOSS OF POWER - 1 ENGINE
REMARKS- L ENG LOST POWER. ACFT OVERGROSSED ABOUT 285 LB.

ALL

226. [Proposed by Chris-Craft] Bangor Punta's preliminary prospectus dated May 29, 1969 and final prospectus dated July 18, 1969 contained the following information supplied by Piper with respect to the Twin Comanche:

> "Model PA-30 Twin Comanche - a four to six-place, twin-engine, low wing airplane of all metal construction with retractable landing gear powered by 160 horsepower engines. The first sales of this high performance airplane, which is the lowest cost twin-engine airplane available, were made in 1963. The turbo-charged model cruises at 240 mph at an altitude of 24,000 feet. The Twin Comanche's suggested price is $39,900."

The final prospectus dated July 18, 1969 contained the following table at page 56:

	Six months ended March 31,		Fiscal year ended September 30,				
	1969	1968	1968	1967	1966	1965	1964
Super Cub	44	64	138	138	141	139	141
Colt	—	—	—	—	—	1	138
Pawnee	168	188	363	337	442	631	473
Cherokee	978	986	2,115	2,455	1,996	1,873	1,218
Cherokee Arrow	235	453	844	65	—	—	—
Cherokee Six	165	146	269	517	655	93	—
Comanche	10	42	93	138	260	365	245
Twin Comanche	129	107	166	303	375	316	460
Aztec/Apache	186	153	277	280	415	400	258
Navajo	113	110	209	69	—	—	—
Total	2,028	2,249	4,474	4,302	4,284	3,818	2,933

The prospectus contained no further statements with respect to the Twin Comanche.

Under the title "Litigation and Insurance" at page 60 of the final prospectus, the following statement was made:

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"Piper maintains insurance to provide protection against claims that inevitably arise from aircraft accidents regardless of their cause. Piper is normally and is now a defendant in a number of law suits, principally involving product liability claims. Some of these claims, if successful, would be subject to deductible provisions of insurance contracts or would be uninsured, but in the opinion of management would have no material effect on the financial condition of Piper."

227. [Proposed by Chris-Craft] At the time of the distribution of Bangor Punta's preliminary and final prospectuses, there was pending an action in the Court of Common Pleas for Philadelphia County, First Judicial District of Pennsylvania entitled "William J. Kramer, by his guardian, Alvin H. Frankel and Grace Kramer vs. Delaware Aviation Corporation, Piper Aircraft Corporation and Avco Corporation, et al." (Index No. 2363) and a companion action entitled "Grace E. Kramer, et al., Executor under the Will of William J. Kramer, Deceased vs. Delaware Aviation Corporation, Piper Aircraft Corporation and Avco Corporation" (Index No. 786) (the "Kramer actions"), both of which actions arose from the crash of a Twin Comanche on July 30, 1967. The first Kramer action was brought on behalf of the father's estate (Index No. 786) on January 11, 1968 in the Court of Common Pleas. The action was brought on behalf of the son in the Federal Court during April 1968. That action was dismissed for lack of jurisdiction and subsequently refiled (Index No. 2363) and consolidated with the father's action (Index No. 786) in November 1968 in the Court of Common Pleas.

ALL

228. [Proposed by Chris-Craft] Under date of August 29, 1969 Piper issued a Service Bulletin with respect to the Twin Comanche which stated:

The V_{mc} speed of 80 MPH is a FAA required placard speed and under the revised FAA regulations shall not exceed 1.2 times the stall speed of the aircraft. V_{mc} is the minimum control speed with the critical engine inoperative and was determined by experienced pilots under favorable flight conditions using proper pilot techniques. Unless the pilot is properly trained qualified and familiar with the airplane in emergency conditions, loss of control of the airplane may occur in emergencies or simulated emergencies at this speed. In the interest of safety therefore, the new placard prohibits single-engine flight below 85 MPH. In addition, power on stalls are prohibited. All other flight maneuvers allowed by an airplane normal category certificate and performed in compliance with the latest Airplane Flight Manual Piper Reports Numbers 1269 and 1515 Revised June 30, 1969 are permissible.

229. [Proposed by Chris-Craft] Mr. McNary testified as follows in the Kramer action:

BY THE COURT:

Q. Did the F.A.A. come in after you had published 301, did they come in and test fly several PA-30's to determine a different V.M.C.? *

A. Yes, sir.

BY MR. MONTEVERDE:

Q. Now, specifically let me refer to your deposition on page 102. Do you recall being asked these questions and giving these answers:

"Q. You know the occasion for investigating the V.M.C. at that time?

A. Yes. The reason was that the manufacturer walked into the F.A.A. and raised, rather prohibited flying the airplane below five miles per hour than the actual V.M.C. on the plane as determined by Piper and the F.A.A. And they said we couldn't do that. So they came back in and reflew the airplanes and determined the new V.M.C.

Q. Is that the V.M.C. that is set forth in 301?

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"A. That's right. That's what we agreed to."

Did you so testify?

A. Yes, sir.

Q And the new V.M.C., which you agreed to was 90 miles per hour; isn't that correct?

A. Yes, sir. That's the speed in one, but that was conducted in a different manner than the law prescribes. And three pilots came in,* two that established 89 miles an hour, and the other pilot established 86, with takeoff flaps. Ninety with flaps up. And they said you permit the airplane to be taken off with flaps up? And he said yes, sir.

They said at what speed do you want to put in your Flight Manual. I said we wanted 90. We wanted the high one.

[pp. 2361-2362]

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* Three FAA pilots flew several Twin Comanches in September 1969.

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The FAA sent an Airworthiness Directive dated November 5, 1969 to Twin Comanche owners which stated:

Our records indicate you are the registered owner of one or more Piper PA-30 aircraft. The PA-30 type airplanes have been found to be in non compliance with CAR 3.105 3.106 and 3.111. The minimum single engine control speed VMC of 80 MPH(CAS) as stated in the FAA approved AFM is not correct. FAA reinvestigation of VMC has resulted in 90 MPH (CAS) applicable to all take off flap settings for the basic configuration as well as turbo-charged and tip tank configurations (Ref. STC No. SA727 WE and No. SA787 WE). Therefore pursuant to the authority of the Federal Aviation Act of 1958 Sec. 313 and 601 delegated by the Administrator (14 CFR 11.89 31 F. R. 13697) the following airworthiness directive is effective immediately upon receipt. APPLIES TO PIPER PA 30 TYPE AIRPLANE CERTIFICATED IN ALL CATEGORIES. BEFORE FURTHER FLIGHT CHANGE THE EXISTING VMC PLACARD TO REFLECT THE FOLLOWING "MINIMUM SINGLE ENGINE CONTROL SPEED 90 MPH."

230. [Proposed by Chris-Craft] The Piper Service Bulletin described in Finding 228 was rescinded by Piper by a Service Bulletin dated November 25, 1969, which stated under "Purpose":

"I. To rescind Piper Service Bulletin No. 301 dated August 29, 1969 and telegrams dated September 19, 1969 and September 23, 1969 to all Piper Distributors and Flight Schools.

II. To provide additional safety in case of single engine operation by increasing Vmc to 90 MPH CAS for all flap settings.

III. To provide additional recommended safe operating practices."

BLL

231. [Proposed by Chris-Craft] The records of the NTSB classify the Twin Comanche accident record from 1964 through 1969 as follows:

RIDER ATTACHED

A2C

233. [Proposed by Chris-Craft] On May 6, 1970 a revised placard listing "Operating Practices Recommended by the Manufacturer" was provided by Piper for installation in all Twin Comanches. The placard read as follows:

"Operating Practices Recommended by the Manufacturer
Minimum Single Engine Maneuvering Speed 97 MPH CAS
Do Not Perform Asymmetric Power Stalls or Single Engine Stalls
Do Not Perform Symmetrical Power-On Stalls Unless Maneuver is Initiated at Least 500 Feet Above Terrain and With Not More Than Pilot and Copilot Aboard Except During Flight Checks

Piper Aircraft Corporation
Lock Haven, Pennsylvania"

234. [Proposed by Chris-Craft] The minutes of a Piper board of directors meeting held on March 2, 1970 contain the following:

Audit for Fiscal Year Ending September 30, 1969

The Chairman then reviewed with the Board the problems involved in the fact that the Board had not accepted the audited financial statements submitted in tenative draft form by its auditors, Arthur Young & Co. He stated that the lack of audited financial statements for the 1969 fiscal year could lead to problems with the lending banks of the Corporation as the Corporation's Bank Loan Agreement called for the submission of such statements to the banks and with the SEC because the Corporation had not filed its annual report on Form 10-K when due. The Chairman

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pointed out that it was possible the Corporation would be fined by the SEC $100 a day commencing on February 11, 1970 until the date of the filing of its Form 10-K with the SEC. He stated that one of the problems with the financials was the possibility of instituting a modification program for the PA-30 Airplane at some cost to the Corporation. Mr. Wallace stated that preliminary study and investigation indicated the possibility of the need for such a program. Mr. Piper expressed his view that no modification of the PA-30 was necessary. The Board agreed that it would be desirable to request the auditors to take appropriate action to bring their audit up to date and for management, at the same time, to determine the cost, nature and details of a modification program for PA-30's in the field. It was requested that the auditors report to the Board as soon as possible. In addition, management will explore with the auditors the establishment of a reserve on the Corporation books to cover the cost of such a program so as to be able to agree on the correct accounting treatment for the costs of any modification program, when and if one was approved by the Board.

Thereupon, upon resolution duly made, seconded, and carried by a vote of seven for and one (Mr. Piper) against, it was

RESOLVED, that this Corporation immediately institute steps to put into effect an effective field modification program for the PA-30.

235. [Proposed by Chris-Craft] The minutes of a Piper board of directors meeting held on April 24, 1970 contains the following:

Discussion of Modification of PA-30 and Related Matters

Mr. Martin advised that he had, just prior to the start of the meeting, received a call from Mr. Liman, counsel for Messrs. Gordon, Rochlis, Barnett, and Chris-Craft Industries, Inc. advising that the aforementioned three gentlemen would not be attending the meeting and stating that Mr. Wallace had discussed the PA-30 modification with Mr. Gordon earlier in the week and that Mr. Wallace could make Mr. Gordon's views as expressed in such conversation known to the Board. Mr. Martin said that Mr. Liman was having a letter from Mr. Gordon to the Directors delivered to the meeting which replied to a previous letter from Mr. W. T. Piper, Jr. to Messrs. Gordon, Rochlis, and Barnett.

Mr. Wallace stated that he spoke to Mr. Gordon on April 12, 1970, to advise him and Messrs. Rochlis and Barnett of the meeting and at that time Mr. Gordon had expressed his view that he felt a modification to the PA-30 consisting of the "counter-rotating engine kit" and the 3 part modification be offered at the Corporation's cost to the PA-30 owners and that the other PA-30 programs discussed at the April 20, 1970 meeting of the Board go forward. Mr. Gordon further stated that he was not satisfied that he had enough information available to him to make a final decision, but based on what he now knows he believed that a $5,800,000 reserve for the costs involved should be established as of September 30, 1969.

Mr. Phillips then read a telegram from the Eastern Region of the FAA to the Corporation approving a revised "operating practices recommended by the manufacturer" placard for the PA-30. This telegram was ordered filed with the minutes of the meeting (Exhibit A).

The Chairman stated the management of the Corporation continued to believe that the three element modification to the PA-30 discussed at the last Board meeting (consisting of flow strips, rudder trim tab, and stabilator travel limit), and which was described in the material distributed at such meeting, improved the handling characteristics of the aircraft and that it should be made available at no cost to all PA-30 owners. He pointed out that the FAA had not as yet evaluated the modification to see if it complied with FAA regulations and that arrangements for such evaluation were being made. He stated that the other programs involving the PA-30 discussed at the last Board meeting were moving forward. These include the education program for PA-30 pilots, the revised operating practices recommended by the manufacturer placard, revised handbooks, and airplane manual, and the making available of a "PA-39" kit (including counter-rotating engines) for sale to PA-30 owners. He then recommended that the Board authorize, subject to FAA approval, the offering of the 3 part modification of the PA-30 to all PA-30 owners at no cost to such owners and, further, that the Board establish a reserve of $250,000 on the books of the Corporation as of September 30, 1969, to cover the anticipated costs to the Corporation of such modification and of the other PA-30 programs being undertaken.

Thereupon, upon motion duly made and seconded, it was

RESOLVED, that subject to FAA approval, the proper officers of the Corporation be, and they hereby are, authorized to take all necessary steps to offer to the registered owners of PA-30 aircraft, at no cost to such owners, a modification to such aircraft consisting of flow strips, rudder trim tab and stabilator travel limit, all as described in material distributed to this Board on April 20, 1970, with such modifications as such officers may deem appropriate, and

RESOLVED, that there be, and it hereby is, established on the books of this Corporation a reserve, of $250,000 to cover the anticipated costs of the modification to the PA-30 and related programs, and that such reserve shall be established as of September 30, 1969, it being the judgment of the Board that such costs properly relate to the prior fiscal period.

236. [Proposed by Chris-Craft] Neither Chris-Craft nor Mr. Gordon were permitted access to the information from Piper documents referred to in Findings* until an order was entered in this action on January 23, 1970 which, at the insistence of Piper and Bangor Punta, provided, in part, as follows:

> "ORDERED that all documents produced by or on behalf of Bangor Punta or Piper which contain information with respect to the Comanche Twin aircraft, also known as PA-30 and PA-39, including the written materials requested in Paragraphs 13 through 17 of the Gordon affidavit, and such portions of Paragraph 22 that may be applicable, and such materials as shall be produced by or on behalf of First Boston pursuant to Paragraph 6(b) of the Gordon affidavit for which its counsel requests such treatment in writing, and all testimony, interrogatories or answers to interrogatories, requests for and written admissions and portions of transcripts containing testimony relating thereto shall be received in confidence and kept secret by plaintiff, its attorneys, accountants and experts as hereinafter provided; and such information and the documents, interrogatories and answers thereto, requests for and written admissions or transcripts containing such information shall not be disclosed to any persons other than the following (each of whom shall first read a copy of this order and agree to the provisions thereof) and then to be disclosed and used only for the prosecution or defense of this action:
>
> [names omitted]
>
> except that the directors of Piper shall be under no restriction that may conflict with

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* Findings 206, 210, 211, 211A, 212, 213, 220A, 225, 225A.

their fiduciary duties as directors concerning the disclosure of information relating to the Comanche Twin provided that notice of such disclosure shall be given as specified below;"

On April 16, 1970 W. T. Piper, Jr., on the letterhead of Piper, wrote the following letter to Mr. Gordon c/o Chris-Craft:

"I have been advised that you are considering furnishing the report of Mr. William Steiglitz entitled, 'PA-30 Investigation - Evaluation of Safety of Piper PA-30 Install Regime' to government agencies, including the Federal Aviation Agency. This report was furnished to the Board of Directors of Piper Aircraft Corporation on Monday, April 13, 1970 and, as you know, is currently being considered by the Board.

"I have discussed this matter informally with other members of the Piper Board of Directors and they agree that I should send you this letter.

"I would like to point out that the Steiglitz report should only be used by you, consistent with your position as a Director of Piper Aircraft Corporation and for no other purpose. Any release of the report to others by you will be your responsibility.

"Finally, you should know that any use of the report inconsistent with your responsibility as a Director of Piper, will cause Piper to seek appropriate remedies, including indemnification by you personally for any loss suffered by Piper Aircraft Corporation."

237. [Proposed by Chris-Craft] The insurance premium charged to Piper for product liability coverage for the four policy years from June 30, 1966 to June 30, 1970 was as follows:

Total Insurance Premiums Paid by Piper for Products Liability Insurance by Policy Year

Policy Year	Insurance Coverage	Amount	Rate
6/30/66 to 6/30/67	$ 5 million	$ 380,384.00	4.80
6/30/67 to 6/30/68	$10 million	$ 686,096.97	7.20
6/30/68 to 6/30/69	$15 million	$1,071,333.31	10.08
6/30/69 to 6/30/70	$15 million	$1,233,789.97	15.00

The policy covering 6/30/69 to 6/30/70 was issued on July 8, 1969, effective as of June 30, 1969. Based upon a rate of $15 per $1,000 of Piper's estimated annual sales for the policy period, the estimated annual premium at the time of the issuance of the policy was $1,731,300.

237A. [Proposed by Piper] The CAB, on May 14, 1970, circulated a questionnaire to all U.S. certificated air carriers requesting information concerning the settlement or judgment of cases arising from aircraft accidents occurring in the period 1960 through 1969. Responses were received from 33 carriers with respec accidents. Based upon the responses by U.S. certific d air carriers, a written report was issued by the CAB entitled "Levels of Recoveries on Account of Passenger Deaths and Serious Injuries In Airplane Accidents." A table included in that report shows, among other things, that with regard to non-Warsaw death settlements and judgments in 1966, 18.3% of such settlements and judgments exceeded $150,000 and in the first half of 1970 58.1% of such settlements and judgments were over this level. Another table included in that report shows, among other things, that in 1966 the average settlement and judgment in a U.S. certificated air carrier passenger death case was $85,003 and in the first half of 1970 was $195,443.

237A(1). [Proposed by Chris-Craft] Piper is not a "carrier" and was not requested to provide any information for the CAB survey referred to in Finding 237A. The CAB survey was not based on the settlement of any accidents involving a Twin Comanche or any other Piper aircraft. The tables contained in the CAB report relied upon by Piper in Finding 237A also show that only 1.7% of the passenger death settlements and judgments occurring during the first half of 1970 exceeded $500,000 and that the settlements and judgments paid during 1970 in 14 cases involving serious injuries by U.S. certificated air carriers aggregated $641,972, representing an average settlement amount of $45,855 per injured person.

239. [Proposed by Chris-Craft] In November 1969 Piper's insurer created a reserve of $450,000 for the Kramer cases described in Finding 227.

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240. [Proposed by Chris-Craft] During trial of the Kramer actions in August 1970 the defendants agreed to a total settlement of $1.1 million. Piper's insurer paid Piper's portion of $366,667 pursuant to the policies described in Finding 237.

241. [Proposed by Chris-Craft] At a Piper board of directors meeting held on September 8, 1970, the Secretary of Piper reported on the settlement of the Kramer actions described in Findings 227 and 240. The minutes then reflect the following:

"* * * In response to a question from Mr. Gordon, Mr. Piper advised that there was no question that the insurance premium of the Corporation would be affected by the loss experience of its insurance carrier and that, in fact, he believed that the cost of settlements for claims against the Corporation had exceeded the premium for every one of the previous eight years. Mr. Piper subsequently contacted the Secretary of the Corporation to state that his reply to Mr. Gordon's question should have been to the effect that in seven out of the last eight years the premium paid by the Corporation had been less than the aggregate of losses paid plus reserves established by the insurance carrier for possible losses and in one of the last eight years the premium had exceeded losses paid plus reserves established for losses. Mr. Piper requested that this clarification appear in the Minutes of the meeting.

242. [BP] Bangor Punta and Chris-Craft did not know of the need, if any, for modification or improvement of the Piper Twin-Commanche until sometime after September, 1969.

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The following pages 759 A to 810 A contain the agreed findings of fact stipulated to by the parties in SEC v. Bangor Punta, docket Nos. 72-1053 and 72-1140. The findings were submitted to the trial court as Exhibit 21. In addition, agreed findings 179A, 179J, 179M, 179N, 1790(b) and (d), 179P(c), 179T, 179U and 179EE(b), supra, pp. 561 A-591 A, are agreed findings in both Chris-Craft v. Piper, et al. and SEC v. Bangor Punta.